Appendix A

Safety Data Sheets for Priority Products Produced by the Submitter of This Abridged AA Report



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Supersedes Revision: 08/03/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS 100X B

Product Name: Quik-Shield 100X B
Company Name: SWD URETHANE
539 S. Drew St.

539 S. Drew St. Mesa, AZ 85210,

Web site address: www.swdurethane.com

Emergency Contact: CHEMTREC (800) 424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 4
Acute Toxicity: Skin, Category 5
Skin Corrosion/Irritation, Category 3

Serious Eye Damage/Eye Irritation, Category 2B



GHS Signal Word: Warning

GHS Hazard Phrases: H227 - Combustible liquid.

H302 - Harmful if swallowed. H311 - Toxic in contact with skin.

H313 - May be harmful in contact with skin.

H314 - Causes severe skin burns and eye damage.

H316 - Causes mild skin irritation. H318 - Causes serious eye damage.

H320 - Causes eye irritation. H330 - Fatal if inhaled.

H402 - Harmful to aquatic life.

GHS Precaution Phrases: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P284 - Wear respiratory protection .

GHS Response Phrases: P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel

unwell.

P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated

clothing. Rinse skin with water/shower.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor/physician.

P321 - Specific treatment see ... on this label.

P330 - Rinse mouth.

P332+313 - If skin irritation occurs, get medical advice/attention.

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P337+313 - If eye irritation persists, get medical advice/attention. P361 - Remove/Take off immediately all contaminated clothing.

P363 - Wash contaminated clothing before reuse.

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

GHS Storage and Disposal

P403+235 - Store in cool/well-ventilated place.

Phrases:

P405 - Store locked up.

P501 - Dispose of contents/container to ...

Potential Health Effects (Acute and Chronic):

Inhalation: Causes respiratory tract irritation. Material is extremely destructive to the tissue of the

mucous membranes and upper respiratory tract. Harmful if inhaled.

Skin Contact: May be harmful if absorbed through the skin. Causes skin irritation. Causes burns. Skin

Absorption: Toxic if absorbed through skin.

Eye Contact: Causes eye irritation. Causes burns.

Ingestion: Harmful if swallowed. Harmful if swallowed.

Small intestine. Large intestine.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # Hazardous Components (Chemical Name) Concentration
13674-84-5 2-Propanol, 1-Chloro-, phosphate (3:1) 30.0 -40.0 %
3033-62-3 Bis(2-(dimethylamino)ethyl)ether <10.0 %

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

In Case of Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician. In case of skin contact,

flush with copious amounts of water for at least 15 minutes. Remove contaminated

clothing and shoes. Call a physician.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Assure adequate flushing by separating the eyelids with fingers. Call a physician.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician. If swallowed, wash out mouth with water provided person is

conscious. Call a physician immediately. Do NOT induce vomiting.

Signs and Symptoms Of

Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have

not been thoroughly investigated. Skin rash. Damage to the liver. Asthma.

Gastrointestinal disturbances. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in spasm, inflammation and edema of the larynxand bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing,

laryngitis, shortness of breath, headache, nausea, and vomiting.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area.

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5. FIRE FIGHTING MEASURES

Flash Pt:

Explosive Limits: LEL: UEL:

Autoignition Pt:

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Suitable:

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary. Protective

Equipment: Wear self-contained breathing apparatus and protective clothing to prevent

contact with skin and eyes. Specific Hazard(s):

Flammable Properties and

Hazards:

Hazardous Combustion

Products:

Spilled:

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or

Personal precautions.

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure

adequate ventilation.

Environmental precautions. Do not let product enter drains.

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL. Evacuate area. PROCEDURE(S) OF PERSONAL PRECAUTION(S) Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for cleaning up.

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste

disposal.

7. HANDLING AND STORAGE

Precautions To Be Taken in

Avoid inhalation of vapor or mist.

Handling:

Normal measures for preventive fire protection. User Exposure: Do not get in eyes, on

skin, on clothing.

Precautions To Be Taken in

Keep container tightly closed in a dry and well-ventilated place. Suitable:

Storing:

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS# **Partial Chemical Name OSHA TWA ACGIH TWA Other Limits** 13674-84-5 2-Propanol, 1-Chloro-, phosphate (3:1) 3033-62-3 Bis(2-(dimethylamino)ethyl)ether TLV: 0.05 ppm STEL: 0.15 ppm

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Respiratory Equipment

(Specify Type):

Eye Protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Face shield and safety glasses.

Protective Gloves: Handle with gloves. Eyes: Chemical safety goggles.

Other Protective Clothing: Choose body protection according to the amount and concentration of the dangerous

substance at the work place.

Engineering Controls

(Ventilation etc.):

Use only in a chemical fume hood. Safety shower and eye bath.

Work/Hygienic/Maintenance

Practices:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash contaminated clothing before reuse.

Discard contaminated shoes. Wash thoroughly after handling.

EXPOSURE LIMITS, RTECS. Country Source Type Value. USA ACGIH TWA 0.05 PPM

Remarks: Skin.
STEL 0.15 PPM
EXPOSURE LIMITS.
USA TWA 0.05 ppm
USA STEL 0.15 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[] Gas	[X] Liquid	[] Solid

Appearance and Odor: Off-white.

Musty.

pH:

Melting Point: Boiling Point: Flash Pt:

Evaporation Rate:

Flammability (solid, gas):

Explosive Limits: LEL: UEL:

Vapor Pressure (vs. Air or

mm Hg):

Vapor Density (vs. Air = 1): Specific Gravity (Water = 1):

Solubility in Water:



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Octanol/Water Partition

Coefficient: Autoignition Pt:

Decomposition Temperature:

Viscosity:

10. STABILITY AND REACTIVITY

Unstable [] Stable [X] Stability:

Conditions To Avoid -

No data available.

Instability:

Incompatibility - Materials To Strong oxidizing agents, Mineral acids, acids (organic, sodium hypochlorite). Corrodes

Avoid: metal.

Hazardous Decomposition or formed under fire conditions. Carbon oxides, Phosphorous oxides, Hydrogen chloride gas, Byproducts:

Thermal decomposition 244 °C Carbon monoxide, Carbon dioxide, Nitrogen oxides,

Ammonia, Nitric acid.

Possibility of Hazardous

Will occur [] Will not occur [X]

Reactions:

Conditions To Avoid -Hazardous Reactions:

11. TOXICOLOGICAL INFORMATION

Toxicological Information: CAS# 13674-84-5:

Acute toxicity, LD50, Oral, Rat, 3600. MG/KG.

Behavioral: Somnolence (general depressed activity).

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Other changes.

- National Technical Information Service, Vol/p/yr: OTS05, 7713

Acute toxicity, LD50, Intravenous, Mouse, 56.00 MG/KG.

Results:

Behavioral: Food intake (animal).

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

- U.S. Army Armament Research & Development Command, Chemical Systems Laboratory, NIOSH Exchange Chemicals., Aberdeen Proving Ground,, Aberdeen

Proving Ground, MD 21010, Vol/p/yr: NX#, 5768

Skin corrosion/irritation, Skin sensitization, Skin, Rabbit, 0.000, Mild.

Results:

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation.

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Cyanosis.

Skin - rabbit - Mild skin irritation - 24 h. Irritation or Corrosion:

> Serious eye damage/eye irritation: Eyes - rabbit - Mild eye irritation.

Carcinogenicity/Other

Carcinogenicity.

Information:

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

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identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by OSHA.

CAS # Hazardous Components (Chemical Name) NTP IARC ACGIH OSHA

13674-84-5 2-Propanol, 1-Chloro-, phosphate (3:1) 3033-62-3 Bis(2-(dimethylamino)ethyl)ether

12. ECOLOGICAL INFORMATION

Persistence and

No data available.

Degradability:

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Product.

Observe all federal, state, and local environmental regulations. Contact a licensed

professional waste disposal service to dispose of this material.

Contaminated packaging.

Dispose of as unused product. APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

14. TRANSPORT INFORMATION

GHS Classification: Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed

Acute Toxicity: Skin, Category 5 - Warning! May be harmful in contact with skin Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation

Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

Aquatic Toxicity (Acute), Category 3 - Harmful to aquatic life

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class: UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

15. REGULATORY INFORMATION

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16. OTHER INFORMATION

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Additional Information About

This Product:

Company Policy or

Disclaimer:

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information, and recommendations or the suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED SWD EMPLOYEE SHALL PROVIDE, OR MAKE AVAILABLE, DATA SHEETS FOR SWD PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SWD. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET OR QUESTIONS REGARDING THIS DATA SHEET SHOULD BE DIRECTRED TO SWD AT 800-828-1394.



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1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS 106 B

Quik-Shield 106 B **Product Name:** SWD URETHANE **Company Name:**

539 S. Drew St. Mesa. AZ 85210.

Web site address: www.swdurethane.com

CHEMTREC Emergency Contact: (800) 424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 4 Acute Toxicity: Skin, Category 5

Skin Corrosion/Irritation, Category 1A-1C Serious Eye Damage/Eye Irritation, Category 2B





GHS Signal Word: Danger

GHS Hazard Phrases: H302 - Harmful if swallowed.

H313 - May be harmful in contact with skin.

H314 - Causes severe skin burns and eye damage.

H320 - Causes eye irritation. H402 - Harmful to aquatic life.

GHS Precaution Phrases: P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel **GHS Response Phrases:**

unwell.

P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated

clothing. Rinse skin with water/shower.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P337+313 - If eye irritation persists, get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

GHS Storage and Disposal

Phrases:

P405 - Store locked up.

Inhalation: Causes respiratory tract irritation. Material is extremely destructive to the tissue of the

mucous membranes and upper respiratory tract. Harmful if inhaled. Skin: May be harmful

if absorbed through skin. May cause skin irritation.

Skin Contact: May be harmful if absorbed through the skin. Causes skin irritation. Causes skin burns.

Causes burns. Skin Absorption: Toxic if absorbed through skin.

Eye Contact: Causes eye irritation. Causes eye burns. Causes burns.

Harmful if swallowed. Harmful if swallowed. Ingestion:

Small intestine. Large intestine. Additional Information.

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RTECS: QJ6950000

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # Hazardous Components (Chemical Name) Concentration

NA Halogenated Phosphate 40.0 -60.0 %
NA Amine Catalyst 2.0 -10.0 %

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

In Case of Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician. Take off contaminated

clothing and shoes immediately. In case of skin contact, flush with copious amounts of

water for at least 15 minutes. Call a physician.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Continue rinsing eyes during transport to hospital. In case of contact with eyes, flush with

copious amounts of water for at least 15 minutes. Assure adequate flushing by

separating the eyelids with fingers. Call a physician. In case of contact, immediately flush

eyes with copious amounts of water for at least 15 minutes.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician. Do NOT induce vomiting. If swallowed, wash out mouth with water

provided person is conscious. Call a physician immediately.

Signs and Symptoms Of

Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have

not been thoroughly investigated.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area.

5. FIRE FIGHTING MEASURES

Flash Pt: > 400.00 F

Explosive Limits: LEL: UEL:

Autoignition Pt:

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Suitable: For

small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide.

For large fires, apply water from as far as possible.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary. Protective

Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

Flammable Properties and

Hazards:

Hazardous Combustion

Products:



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6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or

Spilled:

Personal precautions.

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure

adequate ventilation.

Environmental precautions.

Do not let product enter drains.

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in

suitable, closed containers for disposal. Evacuate personnel to safe areas.

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL. PROCEDURE(S) OF

PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for cleaning up.

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Wear respirator, chemical safety goggles, rubber boots, and heavy rubber

aloves

Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Precautions To Be Taken in

Avoid inhalation of vapor or mist.

Handling:

Normal measures for preventive fire protection. User Exposure: Avoid contact with eyes,

skin, and clothing.

Precautions To Be Taken in

Storing:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Suitable: Keep

away from heat and open flame. Store in a cool, dry place. Hygroscopic.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	Halogenated Phosphate			
NA	Amine Catalyst		TLV: 0.05 ppm	
			STEL: 0.15 ppm	

Respiratory Equipment (Specify Type):

If the respirator is the sole means of protection, use a full-face supplied air respirator.

Use respirators and components tested and approved under appropriate government

standards such as NIOSH (US) or CEN (EU). (EU). Hand: Compatible chemical-resistant gloves. is not required. Where protection is desired, use multi-purpose combination (US)

or type ABEK (EN 14387) respirator cartridges.

Eye Protection: Face shield and safety glasses. Tightly fitting safety goggles. Faceshield (8-inch

minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Chemical safety goggles.

Protective Gloves: Handle with gloves. Use proper glove removal technique (without touching glove's outer

surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Hand: Compatible chemical-resistant gloves. Eyes: Chemical safety goggles.

Other Protective Clothing: Choose body protection according to the amount and concentration of the dangerous

substance at the work place. Complete suit protecting against chemicals.

Engineering Controls

(Ventilation etc.):

Use only in a chemical fume hood. Safety shower and eye bath. Mechanical exhaust

required.

Work/Hygienic/Maintenance

Practices:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash contaminated clothing before reuse.

Discard contaminated shoes. Wash thoroughly after handling.

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EXPOSURE LIMITS, RTECS. Country Source Type Value. USA ACGIH TWA 0.05 PPM

Remarks: Skin. STEL 0.15 PPM EXPOSURE LIMITS. USA TWA 0.05 ppm USA STEL 0.15 ppm

9.	PHYSICAL AND CHEMICAL PROPERT	ΓIES
Physical States:	[] Gas [X] Liquid [] Solid	
Appearance and Odor:	Viscous. Musty.	
pH:		
Melting Point:		
Boiling Point:		
Flash Pt:	> 400.00 F	
Evaporation Rate:		
Flammability (solid, gas):		
Explosive Limits:	LEL: UEL:	
Vapor Pressure (vs. Air or mm Hg):	1	
Vapor Density (vs. Air = 1): Specific Gravity (Water = 1):		
Solubility in Water:		
Octanol/Water Partition		
Coefficient:		
Autoignition Pt:		
Decomposition Temperature :		
Viscosity:		
	10. STABILITY AND REACTIVITY	
Stability:	Unstable [] Stable [X]	
Conditions To Avoid - Instability:	No data available.	
Incompatibility - Materials To Avoid:	No dangerous reaction known under conditions of normal direct Sunlight. Avoid excessive temperatures. Mineral hypochlorite). Corrodes metal.	
Hazardous Decomposition or	formed under fire conditions. Carbon oxides,	
Byproducts:	Phosphorous oxides, Hydrogen chloride gas, Thermal decomposition 244 °C nitrogen oxides (NOx), 0 dioxide, Nitrogen oxides, Ammonia, Nitric acid.	Carbon monoxide, Carbon
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]	
Conditions To Avoid -		

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Hazardous Reactions:



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11. TOXICOLOGICAL INFORMATION

Toxicological Information: CAS# NA:

Acute toxicity, LD50, Oral, Rat, 3600. MG/KG.

Results:

Behavioral: Somnolence (general depressed activity).

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Other changes.

- National Technical Information Service, Vol/p/yr: OTS05, 7713

Acute toxicity, LD50, Intravenous, Mouse, 56.00 MG/KG.

Results:

Behavioral: Food intake (animal).

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

- U.S. Army Armament Research & Development Command, Chemical Systems Laboratory, NIOSH Exchange Chemicals., Aberdeen Proving Ground,, Aberdeen

Proving Ground, MD 21010, Vol/p/yr: NX#, 5768

Skin corrosion/irritation, Skin sensitization, This product does not contain any relevant quantities of materials with critical values that have to be monitored in the workplace.,

Rabbit, 0.000, Mild.

Results:

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation.

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Cyanosis.

Irritation or Corrosion: Skin - rabbit - Mild skin irritation - 24 h.

Serious eye damage/eye irritation:

Skin - rabbit - Corrosive.

Eyes - rabbit - Severe eye irritation.

Carcinogenicity/Other Carcinogenicity.

Information: IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by OSHA.

CAS# **Hazardous Components (Chemical Name) NTP** IARC **ACGIH OSHA**

NA Halogenated Phosphate

NA **Amine Catalyst**

12. ECOLOGICAL INFORMATION

Persistence and No data available. Biodegradability: Degradability: Bioaccumulative Potential: No data available. No data available. Mobility in Soil:

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13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Product.

Observe all federal, state, and local environmental regulations. Contact a licensed

professional waste disposal service to dispose of this material.

Contaminated packaging.

Dispose of as unused product. Offer surplus and non-recyclable solutions to a licensed disposal company. APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION. This combustible material may be burned in a chemical incinerator

equipped with an afterburner and scrubber.

14. TRANSPORT INFORMATION

GHS Classification: Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed

Acute Toxicity: Skin, Category 5 - Warning! May be harmful in contact with skin

Skin Corrosion/Irritation, Category 1A-1C - Danger! Causes severe skin burns and eye

damage

Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class: UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

UN Number:

Hazard Class: TDG Classification:

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not dangerous goods.

UN Number: Hazard Class:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI)

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists

NA Halogenated Phosphate CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes -

Inventory, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI

Air: No

NA Amine Catalyst CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -

Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: Yes

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CAS # Hazardous Components (Chemical Name) International Regulatory Lists

NA Halogenated Phosphate Canadian DSL: Yes; Canadian NDSL: No NA Amine Catalyst Canadian DSL: Yes; Canadian NDSL: No

Regulatory Information: This product contains no chemicals subject to the reporting requirements of section 313

of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 40

CFR part 372.

16. OTHER INFORMATION

Revision Date: 03/09/2017

Additional Information About

This Product:

Company Policy or

Disclaimer:

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information, and recommendations or the suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED SWD EMPLOYEE SHALL PROVIDE, OR MAKE AVAILABLE, DATA SHEETS FOR SWD PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SWD. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET OR QUESTIONS REGARDING THIS DATA SHEET SHOULD BE DIRECTRED TO SWD AT 800-828-1394.



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Supersedes Revision: 01/05/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS A

Product Name: Quik-Shield A
Company Name: SWD URETHANE
539 S. Drew St.

539 S. Drew St. Mesa, AZ 85210,

Web site address: www.swdurethane.com

Emergency Contact: CHEMTREC (800) 424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 5
Skin Corrosion/Irritation, Category 2
Skin Sensitization, Category 1

Serious Eye Damage/Eye Irritation, Category 2B

Acute Toxicity: Inhalation, Category 4
Respiratory Sensitization, Category 1

Carcinogenicity, Category 2





GHS Signal Word: Danger

GHS Hazard Phrases: H303 - May be harmful if swallowed.

H315 - Causes skin irritation.

H317 - Health Hazards: Suspected of causing cancer. May cause damage to organs

through prolonged or repeated exposure.

H320 - Causes eye irritation. H332 - Harmful if inhaled.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H351 - Suspected of causing cancer.

H401 - Toxic to aquatic life.

GHS Precaution Phrases: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash hands thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P284 - Wear respiratory protection .

P285 - In case of inadequate ventilation wear respiratory protection.

GHS Response Phrases: P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P341 - If breathing is difficult, remove to fresh air and keep at rest in a position

comfortable for breathing.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P308+313 - IF exposed or concerned: Get medical attention/advice. P332+313 - If skin irritation occurs, get medical advice/attention.

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P337+313 - If eye irritation persists, get medical advice/attention.

P342+311 - If experiencing respiratory symptoms call a POISON CENTER or

doctor/physician.

P362 - Take off contaminated clothing and wash before re-use.

GHS Storage and Disposal

P405 - Store locked up.

Phrases:

Inhalation: Causes respiratory tract irritation.

Skin Contact: May be harmful if absorbed through the skin. Causes skin irritation.

Eye Contact: Causes eye irritation.

Ingestion: May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # Hazardous Components (Chemical Name) Concentration

101-68-8 Methylenebis(phenylisocyanate) {MBI; 30.0 -60.0 %

Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers 30.0 -60.0 %

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

In Case of Inhalation: If breathed in, move person into fresh air. If not breathing give artificial respiration.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

Signs and Symptoms Of

was a dala

Exposure:

Cough, Shortness of breath, Headache. Nausea. Vomiting, Pulmonary edema. Effects

may be delayed.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area.

5. FIRE FIGHTING MEASURES

Flash Pt: > 150.00 C Method Used: Closed Cup
Explosive Limits: UEL: UEL:

Autoignition Pt: NA

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary.

Flammable Properties and

Hazards:

Hazardous Combustion

Products:

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6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case

Material Is Released Or

Spilled:

Personal precautions.

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure

adequate ventilation.

Environmental precautions. Do not let product enter drains.

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers

for disposal.

7. HANDLING AND STORAGE

Precautions To Be Taken in

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Handling:

Provide appropriate exhaust ventilation at places where dust is formed. Normal

measures for preventive fire protection.

Precautions To Be Taken in

Keep container tightly closed in a dry and well-ventilated place.

Storing:

Recommended storage temperature: 15 - 38 deg.C.

Store under inert gas. Moisture sensitive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Partial Chemical Name CAS# **OSHA TWA ACGIH TWA Other Limits**

Methylenebis(phenylisocyanate) {MBI; CEIL: 0.02 ppm TLV: 0.005 ppm 101-68-8

> Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers

Respiratory Equipment

(Specify Type):

When the product is sprayed or heated without adequate ventilation, an approved MSHA/NIOSH positive-pressure, supplied air respirator may be required. Air purifying respirators equipped with organic vapor cartridges and HEPA (P100) particulate filter may be used under certain conditions when the cartridge change-out schedule has been developed in accordance with the OSHA respiratory protection standard (29 CFR

1910.134).

Eye Protection: Face shield and safety glasses.

Protective Gloves: Handle with gloves.

Other Protective Clothing: Choose body protection according to the amount and concentration of the dangerous

substance at the work place.

Engineering Controls

(Ventilation etc.):

Practices:

Work/Hygienic/Maintenance Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end of workday.

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GHS format

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9.	PHYSICAL AND CHEMICAL PROPERTIES
Physical States:	[] Gas [X] Liquid [] Solid
Appearance and Odor:	Slightly. Musty.
oH:	
Melting Point:	42.00 C - 45.00 C
Boiling Point:	200.00 C
Flash Pt:	> 150.00 C Method Used: Closed Cup
Evaporation Rate:	
Flammability (solid, gas):	
Explosive Limits:	LEL: UEL:
/apor Pressure (vs. Air or	1
nm Hg):	
/apor Density (vs. Air = 1):	
Specific Gravity (Water = 1):	
Density:	1.18 G/CM3
Solubility in Water:	
Octanol/Water Partition	
Coefficient:	A14
Autoignition Pt:	NA
Decomposition Temperature:	
/iscosity:	
	10. STABILITY AND REACTIVITY
Stability:	Unstable [] Stable [X]
Conditions To Avoid -	Contact with moisture, other materials that react with isocyanates, or temperatures above
nstability:	350 °F (177 °C), may cause polymerization.
ncompatibility - Materials To	Water Amines Strong bases Alcohols

Hazardous Decomposition or formed under fire conditions. Carbon oxides,

nitrogen oxides (NOx). Byproducts:

Possibility of Hazardous Will occur [] Will not occur [X]

Reactions:

Conditions To Avoid -Hazardous Reactions:

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11. TOXICOLOGICAL INFORMATION

Toxicological Information:

Irritation or Corrosion: Serious eye damage/eye irritation:

Eyes - rabbit - Moderate eye irritation.

Carcinogenicity/Other

Information:

Carcinogenicity.

This product is or contains a component that is not classifiable as to its carcinogenicity

based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies.

IARC: Group 3: Not classifiable as to its carcinogenicity to humans 3.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by OSHA.

CAS # Hazardous Components (Chemical Name) NTP IARC ACGIH OSHA

101-68-8 Methylenebis(phenylisocyanate) {MBI; Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

3

NA MDI, mixed isomers

12. ECOLOGICAL INFORMATION

Persistence and

Degradability:

No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Product.

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an

afterburner and scrubber.

Contaminated packaging.

Dispose of as unused product.

14. TRANSPORT INFORMATION

GHS Classification: Acute Toxicity: Oral, Category 5 - Warning! May be harmful if swallowed

Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation

Skin Sensitization, Category 1 - Warning! May cause an allergic skin reaction Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

Acute Toxicity: Inhalation, Category 4 - Warning! Harmful if inhaled

Respiratory Sensitization, Category 1 - Danger! May cause allergy or asthma symptoms

or breathing difficulties if inhaled

Carcinogenicity, Category 2 - Warning! Suspected of causing cancer

Aquatic Toxicity (Acute), Category 2 - Toxic to aquatic life

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LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Other regulated substances, Liquid, N.O.S. (Methylene Diphenyl Diisocyanate)

DOT Hazard Class: 9 CLASS 9

UN/NA Number: NA3082 Packing Group: III

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

UN Number: 3082 Packing Group: III

Hazard Class: 9 - CLASS 9 TDG Classification:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

Additional Transport Containers shipped with less than 20,000 LBS are classified as Non-Hazardous.

Information:

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI)

101-68-8 Methylenebis(phenylisocyanate) {MBI; No Yes 5000 LB Yes-Cat. N120

Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers No No Yes-Cat. N120

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists

101-68-8 Methylenebis(phenylisocyanate) {MBI; CAA HAP, ODC: HAP; CWA NPDES: No; TSCA: Yes -

Methylene diphenyl diisocyanate; MDI; Inventory, 8C; CA PROP.65: No; CA TAC, Title 8: TAC, Title Diphenylmethane-4,4'-diisocyanate} 8; MA Oil/HazMat: No; MI CMR, Part 5: Part 5; NC TAP: Yes;

NJ EHS: Yes - Cat.; NY Part 597: Yes; PA HSL: Yes - E; SC

TAP: Yes; WI Air: Yes

NA MDI, mixed isomers CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -

Inventory, 8C, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - Cat.; NY Part 597: No; PA HSL: No; SC TAP:

No; WI Air: No

CAS # Hazardous Components (Chemical Name) International Regulatory Lists

101-68-8 Methylenebis(phenylisocyanate) {MBI; Canadian DSL: Yes; Canadian NDSL: No

Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers Canadian DSL: Yes; Canadian NDSL: No

Regulatory Information: This product contains chemicals subject to the reporting requirements of section 313 of

Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40

CFR part 372.

Incipient fire responders should wear eye protection. Firefighters must wear

Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible,

prevent runoff water from entering storm drains, bodies of water, or other

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environmentally sensitve areas.

Incipient fire responders should wear eye protection. Firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitve areas.

16. OTHER INFORMATION

Revision Date: 07/13/2017

Additional Information About

This Product:

Company Policy or

Disclaimer:

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information, and recommendations or the suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED SWD EMPLOYEE SHALL PROVIDE, OR MAKE AVAILABLE, DATA SHEETS FOR SWD PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SWD. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET OR QUESTIONS REGARDING THIS DATA SHEET SHOULD BE DIRECTRED TO SWD AT 800-828-1394.



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Supersedes Revision: 04/03/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS 108 YM B

Product Name: Quik-Shield 108 YM Resin (B)

SWD URETHANE **Company Name:**

> 539 S. Drew St. Mesa. AZ 85210.

Web site address: www.swdurethane.com

CHEMTREC Emergency Contact:

(800) 424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 4 Acute Toxicity: Skin, Category 5 Skin Corrosion/Irritation, Category 3

Serious Eye Damage/Eye Irritation, Category 2B

Skin Corrosion/Irritation, Category 2

Serious Eye Damage/Eye Irritation, Category 1





GHS Signal Word: Danger

GHS Hazard Phrases: H302 - Harmful if swallowed.

H313 - May be harmful in contact with skin.

H315 - Causes skin irritation. H316 - Causes mild skin irritation. H318 - Causes serious eye damage.

H320 - Causes eye irritation. H402 - Harmful to aquatic life.

GHS Precaution Phrases: P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel **GHS Response Phrases:**

P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor/physician.

P321 - Specific treatment see ... on this label.

P330 - Rinse mouth.

P332+313 - If skin irritation occurs, get medical advice/attention. P337+313 - If eye irritation persists, get medical advice/attention. P362 - Take off contaminated clothing and wash before re-use.

GHS Storage and Disposal

P501 - Dispose of contents/container to ...

Phrases:

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GHS format

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Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. Material is irritating to

mucous membranes and upper respiratory tract.

Skin Contact: May be harmful if absorbed through the skin. Causes skin irritation. Causes burns. Skin

Absorption: Toxic if absorbed through skin.

Eye Contact: Causes eye irritation. Causes burns. Causes eye burns.

Ingestion: Harmful if swallowed. Harmful if swallowed.

Small intestine. Large intestine.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # Hazardous Components (Chemical Name) Concentration

NA Halogenated Phosphate 30.0 -50.0 %

NA Non-Emissive Amine Catalyst 5.0 -10.0 %

NA Proprietary Amine 0.0 -10.0 %

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

In Case of Inhalation: If breathed in, move person into fresh air. If not breathing give artificial respiration. If

inhaled, remove to fresh air. Consult a physician.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician. In case of contact,

immediately wash skin with soap and copious amounts of water. In case of skin contact, flush with copious amounts of water for at least 15 minutes. Call a physician. Take off

contaminated clothing and shoes immediately.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. In

case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. In case of contact with eyes, flush with copious amounts of water for at least 15

minutes. Assure adequate flushing by separating the eyelids with fingers. Call a

physician. Continue rinsing eyes during transport to hospital.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician. If swallowed, wash out mouth with water provided person is conscious. Call a physician. Call a physician immediately. Do NOT induce vomiting.

Signs and Symptoms Of

Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have

not been thoroughly investigated. Skin rash. Damage to the liver. Asthma.

Gastrointestinal disturbances. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in spasm, inflammation and edema of the larynxand bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing,

laryngitis, shortness of breath, headache, nausea, and vomiting. Cough,

Shortness of breath, Headache.

Note to Physician: Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

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5. FIRE FIGHTING MEASURES

Flash Pt:

Explosive Limits: LEL: UEL:

Autoignition Pt:

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Suitable: For

small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide.

For large fires, apply water from as far as possible.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary. Protective

Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

Flammable Properties and

Hazards:

Hazardous Combustion

Products:

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or

Spilled:

Personal precautions.

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure

adequate ventilation.

Environmental precautions.

Do not let product enter drains.

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in

suitable, closed containers for disposal. PROCEDURE(S) OF PERSONAL

PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for cleaning up.

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete. PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL. Evacuate area. Wear self-contained breathing apparatus,

rubber boots, and heavy rubber gloves.

7. HANDLING AND STORAGE

Precautions To Be Taken in

Avoid inhalation of vapor or mist.

Handling:

Normal measures for preventive fire protection. User Exposure: Avoid contact with eyes,

skin, and clothing.

Precautions To Be Taken in

Keep container tightly closed in a dry and well-ventilated place. Suitable: Keep tightly

Storing:

closed. Keep away from heat and open flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Limits

NA Halogenated Phosphate

NA Non-Emissive Amine Catalyst

NA Proprietary Amine

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Respiratory Equipment

(Specify Type):

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN

(EU). Hand: Compatible chemical-resistant gloves.

Eye Protection: Face shield and safety glasses. Chemical safety goggles. Tightly fitting safety goggles.

Faceshield (8-inch minimum). Use equipment for eye protection tested and approved

under appropriate government standards such as NIOSH (US) or EN 166(EU).

Protective Gloves: Handle with gloves. Eyes: Chemical safety goggles. Use proper glove removal technique

(without touching glove's outer surface) to avoid skin contact with this product. Wash and

dry hands.

Other Protective Clothing: Choose body protection according to the amount and concentration of the dangerous

substance at the work place. Complete suit protecting against chemicals.

Engineering Controls

(Ventilation etc.):

Solubility in Water:

Mechanical exhaust required. Safety shower and eye bath. Use only in a chemical fume

hood.

Work/Hygienic/Maintenance

Practices:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash thoroughly after handling. Wash

contaminated clothing before reuse. Discard contaminated shoes. EXPOSURE LIMITS,

RTECS.

Country Source Type Value. USA ACGIH TWA 0.05 PPM

Remarks: Skin.
STEL 0.15 PPM
EXPOSURE LIMITS.
USA TWA 0.05 ppm
USA STEL 0.15 ppm

9.	PHYSIC	CAL AND (CHEMICAL	PROPERTIES	
Physical States:	[] Gas	[X] Liquid	[] Solid		
Appearance and Odor:	amber.				
	Musty.				
pH:					
Melting Point:					
Boiling Point:					
Flash Pt:					
Evaporation Rate:					
Flammability (solid, gas):					
Explosive Limits:	LEL:		UEL:		
Vapor Pressure (vs. Air or					
mm Hg):					
Vapor Density (vs. Air = 1):					
Specific Gravity (Water = 1):					



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GHS format

Supersedes Revision: 04/03/2015

Octanol/Water Partition

Coefficient:

Autoignition Pt:

Decomposition Temperature:

Viscosity:

10. STABILITY AND REACTIVITY

Unstable [] Stable [X] Stability:

Conditions To Avoid -

No data available.

Instability:

Incompatibility - Materials To Strong oxidizing agents. Mineral acids, acids (organic, sodium hypochlorite). Corrodes

Avoid:

metal. Avoid moisture. Avoid direct Sunlight. Avoid excessive temperatures.

Hazardous Decomposition or formed under fire conditions. Carbon oxides, Phosphorous oxides, Hydrogen chloride gas, Byproducts:

Thermal decomposition 244 °C Carbon monoxide, Carbon dioxide, Nitrogen oxides,

Ammonia, Nitric acid, nitrogen oxides (NOx).

Possibility of Hazardous

Will occur [] Will not occur [X]

Reactions:

Conditions To Avoid -Hazardous Reactions:

11. TOXICOLOGICAL INFORMATION

Toxicological Information: CAS# NA:

Acute toxicity, LD50, Oral, Rat, 3600. MG/KG.

Behavioral: Somnolence (general depressed activity).

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Other changes.

- National Technical Information Service, Vol/p/yr: OTS05, 7713

Acute toxicity, LD50, Intravenous, Mouse, 56.00 MG/KG.

Results:

Behavioral: Food intake (animal).

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

- U.S. Army Armament Research & Development Command, Chemical Systems Laboratory, NIOSH Exchange Chemicals., Aberdeen Proving Ground,, Aberdeen

Proving Ground, MD 21010, Vol/p/yr: NX#, 5768

Skin corrosion/irritation, Skin sensitization, This product does not contain any relevant quantities of materials with critical values that have to be monitored in the workplace.,

Rabbit, 0.000, Mild.

Results:

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation.

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Cyanosis.

Irritation or Corrosion: Skin - rabbit - Mild skin irritation - 24 h.

Serious eye damage/eye irritation:

Skin - rabbit - Corrosive.

Eyes - rabbit - Severe eye irritation.

Carcinogenicity/Other

Carcinogenicity.

Information: IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

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ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by OSHA.

CAS # Hazardous Components (Chemical Name) NTP IARC ACGIH OSHA

NA Halogenated Phosphate

NA Non-Emissive Amine Catalyst

NA Proprietary Amine

12. ECOLOGICAL INFORMATION

Persistence and No data available.

Degradability: Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Product.

Observe all federal, state, and local environmental regulations. Contact a licensed

professional waste disposal service to dispose of this material.

Contaminated packaging.

Dispose of as unused product. APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and

non-recyclable solutions to a licensed disposal company.

14. TRANSPORT INFORMATION

GHS Classification: Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed

Acute Toxicity: Skin, Category 5 - Warning! May be harmful in contact with skin Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation

Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

Aquatic Toxicity (Acute), Category 3 - Harmful to aquatic life

Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation

Serious Eye Damage/Eye Irritation, Category 1 - Danger! Causes serious eye damage

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name:

DOT Hazard Class: UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name:

UN Number:

Hazard Class: TDG Classification:



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AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Non-Hazardous for Air Transport: Non-hazardous for air transport. UN Number:

2927 Hazard Class: 6.1 Packing Group: II.

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI)

NAHalogenated PhosphateNoNoNoNANon-Emissive Amine CatalystNoNoNoNAProprietary AmineNoNoNo

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists

NA Halogenated Phosphate CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -

Inventory, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI

Air: No

NA Non-Emissive Amine Catalyst CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA

PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No;

PA HSL: No; SC TAP: No; WI Air: No

NA Proprietary Amine CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA

PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No;

PA HSL: No; SC TAP: No; WI Air: No

CAS # Hazardous Components (Chemical Name) International Regulatory Lists

NA Halogenated Phosphate Canadian DSL: Yes; Canadian NDSL: No Non-Emissive Amine Catalyst Canadian DSL: No; Canadian NDSL: No

NA Proprietary Amine Canadian DSL: No; Canadian NDSL: No

16. OTHER INFORMATION

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Additional Information About

This Product:

Company Policy or

Disclaimer:

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of

the user to determine the applicability of such information, and recommendations or the

suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED SWD EMPLOYEE SHALL PROVIDE, OR MAKE AVAILABLE, DATA SHEETS FOR SWD PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET

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MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SWD. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET OR QUESTIONS REGARDING THIS DATA SHEET SHOULD BE DIRECTRED TO SWD AT 800-828-1394.



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1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS 112 B

Product Name: Quik-Shield 112 B SWD URETHANE **Company Name:** 539 S. Drew St.

Mesa. AZ 85210.

Web site address: www.swdurethane.com

CHEMTREC Emergency Contact:

(800) 424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 4 Acute Toxicity: Skin, Category 5 Skin Corrosion/Irritation, Category 3

Serious Eye Damage/Eye Irritation, Category 2B

Aquatic Toxicity (Acute), Category 3



GHS Signal Word: Warning

H302 - Harmful if swallowed. **GHS Hazard Phrases:**

H313 - May be harmful in contact with skin.

H316 - Causes mild skin irritation. H320 - Causes eye irritation. H402 - Harmful to aquatic life.

P264 - Wash hands thoroughly after handling. **GHS Precaution Phrases:**

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

GHS Response Phrases: No phrases apply. GHS Storage and Disposal No phrases apply.

Phrases:

Potential Health Effects (Acute and Chronic):

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. May cause narcotic effects

in high concentration. Eye irritation, vertigo, and nausea were reported in humans

exposed at 2200 ppm.

May be harmful if absorbed through the skin. Causes skin irritation. Causes moderate Skin Contact:

skin irritation. May cause dermatitis.

Eye Contact: Causes eye irritation.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and

diarrhea. May cause central nervous system depression.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # Hazardous Components (Chemical Name) Concentration

460-73-1 1,1,1,3,3-Pentafluoropropane {HFC-245fa} 7.0 -13.0 %

NA Halogenated Phosphate 7.0 -13.0 % 156-60-5 Trans-1,2-Dichloroethylene 1.0 -3.0 %

{1,2-trans-Dichloroethylene; Ethene,

1,2-dichloro-, (E)-}

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

In Case of Inhalation: If breathed in, move person into fresh air. If inhaled, remove to fresh air. If not breathing,

give artificial respiration. Get medical aid.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician. In case of contact, flush

skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if

irritation develops and persists. Wash clothing before reuse.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. In

case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get

medical aid.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician. Get medical aid.

Signs and Symptoms Of

Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have

not been thoroughly investigated.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area. Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary. As in any fire, wear

a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form explosive mixtures with air. Use water spray to keep fire-exposed containers cool. Flammable liquid and vapor. Fire or excessive heat may result in violent rupture of the container due to bulk polymerization. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors

can spread along the ground and collect in low or confined areas.

Flammable Properties and

Hazards:

No data available.

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6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Personal precautions.

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure

adequate ventilation.

Environmental precautions. Do not let product enter drains.

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:

Avoid inhalation of vapor or mist.

Normal measures for preventive fire protection. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Pure vapor will be uninhibited and may

polymerize in vents or other confined spaces.

Precautions To Be Taken in Storing:

Keep container tightly closed in a dry and well-ventilated place. Keep away from sources of ignition. Store in a tightly closed container. Flammables-area. Store protected from light and air.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	No data.	No data.	No data.
NA	Halogenated Phosphate	No data.	No data.	No data.
156-60-5	Trans-1,2-Dichloroethylene {1,2-trans-Dichloroethylene; Ethene, 1,2-dichloro-, (E)-}	No data.	TLV: 200 ppm	No data.

Respiratory Equipment (Specify Type):

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Face shield and safety glasses. Wear chemical splash goggles. **Eve Protection:**

Protective Gloves: Handle with gloves. Wear appropriate protective gloves to prevent skin exposure. Choose body protection according to the amount and concentration of the dangerous Other Protective Clothing:

substance at the work place. Wear appropriate protective clothing to prevent skin

exposure.

Engineering Controls Use process enclosure, local exhaust ventilation, or other engineering controls to control

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(Ventilation etc.): airborne levels below recommended exposure limits. Facilities storing or utilizing this

material should be equipped with an eyewash facility and a safety shower.

Work/Hygienic/Maintenance

Practices:

Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIE

Physical States: [] Gas [X] Liquid [] Solid

Viscous. Appearance and Odor:

Light. Brown.

No data. Melting Point: No data. **Boiling Point:** Autoignition Pt: No data. Flash Pt: No data.

LEL: No data. UEL: No data. **Explosive Limits:**

Specific Gravity (Water = 1): No data. Vapor Pressure (vs. Air or No data.

mm Hg):

Vapor Density (vs. Air = 1): No data. **Evaporation Rate:** No data. No data. Solubility in Water: Percent Volatile: No data.

10. STABILITY AND REACTIVITY

Unstable [] Stable [X] Stability:

Conditions To Avoid -No data available.

Instability: Light, ignition sources, Exposure to air.

Incompatibility - Materials To Strong oxidizing agents, Strong bases, Copper.

Avoid:

Hazardous Decomposition or formed under fire conditions. Carbon oxides, Phosphorous oxides, Hydrogen chloride gas, Byproducts:

Thermal decomposition 244 °C Hydrogen chloride, phosgene, Carbon monoxide.

Possibility of Hazardous

Reactions:

Will occur [] Will not occur [X]

Conditions To Avoid -

No data available.

Hazardous Reactions:



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11. TOXICOLOGICAL INFORMATION

Toxicological Information: E

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies:

CAS# NA:

Acute toxicity, LD50, Oral, Rat, 3600. MG/KG.

Results:

Behavioral: Somnolence (general depressed activity).

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Other changes.

- National Technical Information Service, Vol/p/yr: OTS05, 7713

Acute toxicity, LD50, Intravenous, Mouse, 56.00 MG/KG.

Results:

Behavioral: Food intake (animal).

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

- U.S. Army Armament Research & Development Command, Chemical Systems Laboratory, NIOSH Exchange Chemicals., Aberdeen Proving Ground,, Aberdeen

Proving Ground, MD 21010, Vol/p/yr: NX#, 5768

Skin corrosion/irritation, Skin sensitization, Skin, Rabbit, 0.000, Mild.

Results:

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation.

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Cyanosis.

CAS# 156-60-5:

Reproductive Effects:, TCLo, Inhalation, Rat, 6000. PPM, 6 H, female 7-16 day(s) after conception.

Results:

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

- Fundamental and Applied Toxicology., Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 20,225, 1993

Reproductive Effects:, TCLo, Inhalation, Rat, 12000. PPM, 6 H, female 7-16 day(s) after conception.

Results:

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

- Fundamental and Applied Toxicology., Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 20,225, 1993

Mutagenicity:, Mutation test: Mutation in microorganisms., 50.00 UG/PLAT, Bacteria - Salmonella typhimurium,.

Results:

Behavioral: Sleep.

Behavioral: Hallucinations, distorted perceptions.

- Toxicological and Environmental Chemistry., Gordon & Breach Science Pub. Inc., New York, NY, Vol/p/yr: 15,101, 1987

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Mutagenicity:, Gene conversion and mitotic recombination., 80.00 MMOL/L,

Saccharomyces cerevisiae.

Results:

Behavioral: Coma.

Lungs, Thorax, or Respiration: Dyspnea.

Nutritional and Gross Metabolic: Changes in: Metabolic acidosis.

- Teratogenesis, Carcinogenesis, and Mutagenesis., Alan R. Liss, Inc., 41 E. 11th St.,

New York, NY 10003, Vol/p/yr: 4,365, 1984

Mutagenicity:, Mutation test: DNA damage., 22.00 MMOL/L, Saccharomyces cerevisiae.

Results:

Behavioral: Coma.

Vascular: BP lowering not charactertized in autonomic section.

Nutritional and Gross Metabolic: Changes in: Metabolic acidosis.

- Mutation Research., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam

Netherlands, Vol/p/yr: 206,209, 1988

Mutagenicity:, Sex chromosome loss and nondisjunction, 51500. UMOL/L,

Saccharomyces cerevisiae.

Results:

Gastrointestinal:Nausea or vomiting.

- Mutation Research., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam Netherlands, Vol/p/yr: 206,209, 1988

Mutagenicity:, Sex chromosome loss and nondisjunction, Species: Hamster, 6500. UMOL/L, Cell Type: lung..

Results:

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes.

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Other.

Lungs, Thorax, or Respiration:Other changes.

- Mutation Research., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam Netherlands, Vol/p/yr: 182,135, 1987

Other Studies:, TDLo, Oral, Rat, 113.0 GM/KG, 90 D.

Results:

Kidney, Ureter, Bladder: Changes in bladder weight.

- Journal of the American College of Toxicology., Mary Ann Liebert, Inc., New York, NY,

Vol/p/yr: 6(4),471, 1987

Other Studies:, TCLo, Inhalation, Rat, 200.0 PPM, 8 W.

Results:

Lungs, Thorax, or Respiration:Other changes.

Liver: Other changes.

Endocrine: Changes in endocrine weight (unspecified).

- Toxicology., Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick Ireland, Vol/p/yr: 7(2),141, 1977

Acute toxicity, TCLo, Inhalation, Human, 4800. MG/M3, 10 M.

Results:

Behavioral: Sleep.

Behavioral: Hallucinations, distorted perceptions.

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- Archiv fuer Hygiene und Bakteriologie., For publisher information, see ZHPMAT, Munich Fed. Rep. Ger., Vol/p/yr: 116,131, 1936

Acute toxicity, LD50, Oral, Rat, 1235. MG/KG.

Results:

Cardiac:Other changes.

Lungs, Thorax, or Respiration:Other changes.

Liver: Fatty liver degeneration.

- Toxicology., Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick Ireland, Vol/p/yr: 7,141, 1977

Acute toxicity, LD50, Intraperitoneal, Rat, 7411. MG/KG.

Results:

Cardiac:Other changes.

Lungs, Thorax, or Respiration:Other changes.

Liver: Fatty liver degeneration.

- Toxicology., Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick Ireland, Vol/p/yr: 7,141, 1977

Acute toxicity, LD50, Oral, Mouse, 2122. MG/KG.

Results:

Behavioral: Altered sleep time (including change in righting reflex).

Behavioral: Somnolence (general depressed activity).

Behavioral: Ataxia.

- Drug and Chemical Toxicology., Marcel Dekker, 270 Madison Ave., New York, NY 10016, Vol/p/yr: 8,373, 1985

Acute toxicity, LCLO, Inhalation, Mouse, 75.00 GM/M3, 2 H.

Results:

Behavioral: General anesthetic.

Behavioral: Convulsions or effect on seizure threshold.

Lungs, Thorax, or Respiration: Dyspnea.

- Archiv fuer Hygiene und Bakteriologie., For publisher information, see ZHPMAT, Munich Fed. Rep. Ger., Vol/p/yr: 116,131, 1936

Acute toxicity, LD50, Intraperitoneal, Mouse, 3952. MG/KG.

Results:

Behavioral: General anesthetic.

Behavioral: Convulsions or effect on seizure threshold.

Gastrointestinal: Nausea or vomiting.

- Toxicology., Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick Ireland, Vol/p/yr: 7,141, 1977

Acute toxicity, LCLO, Inhalation, Species: Cat, 43.00 GM/M3, 6 H.

Results:

Behavioral: General anesthetic.

Behavioral: Convulsions or effect on seizure threshold.

Gastrointestinal: Nausea or vomiting.

 Archiv fuer Hygiene und Bakteriologie., For publisher information, see ZHPMAT, Munich Fed. Rep. Ger., Vol/p/yr: 116,131, 1936

Acute toxicity, LD50, Skin, Species: Rabbit, > 5.000 GM/KG.

Results:

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Skin and Appendages: Skin: After systemic exposure: Dermatitis, irritative. Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

- Acute Toxicity Data. Journal of the American College of Toxicology, Part B., Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128, Vol/p/yr: 1,10, 1990

Standard Draize Test, Skin, Species: Rabbit, 500.0 MG, 24 H.

Results:

Effects on Newborn: Growth statistics (e.g., reduced weight gain).

- Acute Toxicity Data. Journal of the American College of Toxicology, Part B., Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128, Vol/p/yr: 1,11, 1990

Standard Draize Test, Eyes, Species: Rabbit, 10.00 MG.

Results:

Behavioral: Sleep.

Behavioral: Hallucinations, distorted perceptions.

- Acute Toxicity Data. Journal of the American College of Toxicology, Part B., Mary Ann

Liebert, Inc., 1651 Third Ave., New York, NY 10128, Vol/p/yr: 1,11, 1990

Irritation or Corrosion: Skin - rabbit - Mild skin irritation - 24 h.

Serious eye damage/eye irritation: Eyes - rabbit - Mild eye irritation.

Carcinogenicity/Other

Information:

Carcinogenicity.

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by OSHA. CAS# 156-60-5: Not listed

by ACGIH, IARC, NTP, or CA Prop 65.

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	n.a.	n.a.	n.a.	n.a.
NA	Halogenated Phosphate	n.a.	n.a.	n.a.	n.a.
156-60-5	Trans-1,2-Dichloroethylene {1,2-trans-Dichloroethylene; Ethene, 1,2-dichloro-, (E)-}	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

No data available.

Persistence and

Degradability:

No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

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13. DISPOSAL CONSIDERATIONS

Product. Waste Disposal Method:

Observe all federal, state, and local environmental regulations. Contact a licensed

professional waste disposal service to dispose of this material.

Contaminated packaging.

Dispose of as unused product. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. RCRA P-Series: None listed.

RCRA U-Series:

CAS# 156-60-5: waste number U079.

14. TRANSPORT INFORMATION

GHS Classification: Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed

> Acute Toxicity: Skin, Category 5 - Warning! May be harmful in contact with skin Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation

Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

Aquatic Toxicity (Acute), Category 3 - Harmful to aquatic life

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class: UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

UN Number:

NA

TDG Classification: Hazard Class:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	No	No	No
NA	Halogenated Phosphate	No	No	No
156-60-5	Trans-1,2-Dichloroethylene	No	Yes 1000 LB	No

{1,2-trans-Dichloroethylene; Ethene,

1,2-dichloro-, (E)-}

CAS# **Hazardous Components (Chemical Name)** Other US EPA or State Lists

460-73-1 1,1,1,3,3-Pentafluoropropane {HFC-245fa} CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes -

> Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No

CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes -

Inventory, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI

Air: No

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Halogenated Phosphate

GHS format

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156-60-5 Trans-1,2-Dichloroethylene

{1,2-trans-Dichloroethylene; Ethene,

1,2-dichloro-, (E)-}

Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NC TAP: No; NJ EHS: No; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: No;

CAA HAP, ODC: No; CWA NPDES: Yes; TSCA: Yes -

WI Air: No

CAS # Hazardous Components (Chemical Name)

460-73-1 1,1,1,3,3-Pentafluoropropane {HFC-245fa}

NA Halogenated Phosphate 156-60-5 Trans-1,2-Dichloroethylene

{1,2-trans-Dichloroethylene; Ethene,

1,2-dichloro-, (E)-}

International Regulatory Lists

Canadian DSL: Yes; Canadian NDSL: No Canadian DSL: Yes; Canadian NDSL: No Canadian DSL: Yes; Canadian NDSL: No

Regulatory Information: This product contains no chemicals subject to the reporting requirements of section 313

of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 40

CFR part 372.

Regulatory Information

Statement:

16. OTHER INFORMATION

Revision Date: 04/30/2015

Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information, and recommendations or the suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED SWD EMPLOYEE SHALL PROVIDE, OR MAKE AVAILABLE, DATA SHEETS FOR SWD PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SWD. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET OR QUESTIONS REGARDING THIS DATA SHEET SHOULD BE DIRECTRED TO SWD AT 800-828-1394.



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Supersedes Revision: 02/03/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS 118 RESIN

Quik-Shield 118 Resin Product Name: **Company Name:** SWD URETHANE

539 S. Drew St. Mesa. AZ 85210.

Web site address: www.swdurethane.com

CHEMTREC Emergency Contact:

(800) 424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 4 Acute Toxicity: Skin, Category 5 Skin Corrosion/Irritation, Category 3

Serious Eye Damage/Eye Irritation, Category 2B



GHS Signal Word: Warning

GHS Hazard Phrases: H302 - Harmful if swallowed.

H313 - May be harmful in contact with skin.

H316 - Causes mild skin irritation. H320 - Causes eye irritation. H402 - Harmful to aquatic life.

GHS Precaution Phrases: P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

GHS Response Phrases: GHS Storage and Disposal

Phrases:

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. May cause narcotic effects

in high concentration. Eye irritation, vertigo, and nausea were reported in humans

exposed at 2200 ppm.

Skin Contact: May be harmful if absorbed through the skin. Causes skin irritation. Causes moderate

skin irritation. May cause dermatitis.

Eye Contact: Causes eye irritation.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and

diarrhea. May cause central nervous system depression.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Hazardous Components (Chemical Name)	Concentration
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	7.0 -13.0 %
NA	Halogenated Phosphate	7.0 -13.0 %
NA	Proprietary Blowing Agent	1.0 -3.0 %

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4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

In Case of Inhalation: If breathed in, move person into fresh air. If inhaled, remove to fresh air. If not breathing,

give artificial respiration. Get medical aid.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician. In case of contact, flush

skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if

irritation develops and persists. Wash clothing before reuse.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. In

case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get

medical aid.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician. Get medical aid.

Signs and Symptoms Of

Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have

not been thoroughly investigated.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area. Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flash Pt:

Explosive Limits: LEL: UEL:

Autoignition Pt:

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary. As in any fire, wear

a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form explosive mixtures with air. Use water spray to keep fire-exposed containers cool. Flammable liquid and vapor. Fire or excessive heat may result in violent rupture of the container due to bulk polymerization. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors

can spread along the ground and collect in low or confined areas.

Flammable Properties and

Hazards:

Hazardous Combustion

Products:

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or

Spilled:

Personal precautions.

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure

adequate ventilation.

Environmental precautions.

Do not let product enter drains.

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Use proper personal protective equipment as

indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place

in suitable container. Remove all sources of ignition. Use a spark-proof tool.

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7. HANDLING AND STORAGE

Precautions To Be Taken in

Handling:

Avoid inhalation of vapor or mist.

Normal measures for preventive fire protection. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Pure vapor will be uninhibited and may

polymerize in vents or other confined spaces.

Precautions To Be Taken in

Storing:

Keep container tightly closed in a dry and well-ventilated place. Keep away from sources of ignition. Store in a tightly closed container. Flammables-area. Store protected from

light and air.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Limits

460-73-1 1,1,1,3,3-Pentafluoropropane

{HFC-245fa}

NA Halogenated Phosphate

NA Proprietary Blowing Agent TLV: 200 ppm

Respiratory Equipment

(Specify Type): respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components terms

cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are

Where risk assessment shows air-purifying respirators are appropriate use a full-face

experienced.

Eye Protection: Face shield and safety glasses. Wear chemical splash goggles.

Protective Gloves: Handle with gloves. Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Choose body protection according to the amount and concentration of the dangerous

substance at the work place. Wear appropriate protective clothing to prevent skin

exposure.

Engineering Controls

(Ventilation etc.):

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this

material should be equipped with an eyewash facility and a safety shower.

Work/Hygienic/Maintenance

Practices:

Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end of workday.



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	·	
9.	PHYSICAL AND CHEMICAL PROPERTIES	
Physical States: Appearance and Odor:	[] Gas [X] Liquid [] Solid Viscous.	
	Light. Brown.	
pH:		
Melting Point:		
Boiling Point:		
Flash Pt:		
Evaporation Rate:		
Flammability (solid, gas):		
Explosive Limits:	LEL: UEL:	
Vapor Pressure (vs. Air or mm Hg):		
Vapor Density (vs. Air = 1):		
Specific Gravity (Water = 1):		
Solubility in Water:		
Octanol/Water Partition		
Coefficient:		
Autoignition Pt:		
Decomposition Temperature:		
Viscosity:		
	10. STABILITY AND REACTIVITY	
Stability:	Unstable [] Stable [X]	
Conditions To Avoid -	No data available.	
Instability:	Light, ignition sources, Exposure to air.	
Incompatibility - Materials To Avoid:	No dangerous reaction known under conditions of normal use. Strong bases, Copper.	
Hazardous Decomposition or	formed under fire conditions. Carbon oxides,	
Byproducts:	Phosphorous oxides, Hydrogen chloride gas,	
	Thermal decomposition 244 °C Hydrogen chloride, phosgene, Carbon monoxide.	
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]	
Conditions To Avoid - Hazardous Reactions:		



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11. TOXICOLOGICAL INFORMATION

Toxicological Information: Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies:

CAS# NA:

Acute toxicity, LD50, Oral, Rat, 3600. MG/KG.

Results:

Behavioral: Somnolence (general depressed activity).

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Other changes.

- National Technical Information Service, Vol/p/yr: OTS05, 7713

Acute toxicity, LD50, Intravenous, Mouse, 56.00 MG/KG.

Results:

Behavioral: Food intake (animal).

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

- U.S. Army Armament Research & Development Command, Chemical Systems Laboratory, NIOSH Exchange Chemicals., Aberdeen Proving Ground,, Aberdeen

Proving Ground, MD 21010, Vol/p/yr: NX#, 5768

Skin corrosion/irritation, Skin sensitization, This product does not contain any relevant quantities of materials with critical values that have to be monitored in the workplace.,

Rabbit, 0.000, Mild.

Results:

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation.

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Cyanosis.

Skin - rabbit - Mild skin irritation - 24 h. Irritation or Corrosion:

Serious eye damage/eye irritation:

Eyes - rabbit - Mild eye irritation.

Carcinogenicity/Other

Information:

Carcinogenicity.

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. CAS# 156-60-5: Not listed

by ACGIH, IARC, NTP, or CA Prop 65.

CAS# **Hazardous Components (Chemical Name)** NTP IARC **ACGIH OSHA**

460-73-1 1,1,1,3,3-Pentafluoropropane {HFC-245fa}

NA Halogenated Phosphate NA Proprietary Blowing Agent

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12. ECOLOGICAL INFORMATION

Persistence and

No data available.

Degradability:

No data available. Bioaccumulative Potential: Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Product.

Observe all federal, state, and local environmental regulations. Contact a licensed

professional waste disposal service to dispose of this material.

Contaminated packaging.

Dispose of as unused product. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. RCRA P-Series: None listed.

RCRA U-Series:

CAS# 156-60-5: waste number U079.

14. TRANSPORT INFORMATION

GHS Classification: Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed

> Acute Toxicity: Skin, Category 5 - Warning! May be harmful in contact with skin Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

Aquatic Toxicity (Acute), Category 3 - Harmful to aquatic life

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class: UN/NA Number:

LAND TRANSPORT (Canadian TDG):

Not Regulated. TDG Shipping Name:

UN Number:

CAS#

TDG Classification: Hazard Class:

MARINE TRANSPORT (IMDG/IMO):

Not Regulated. **IMDG/IMO Shipping Name:**

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

15. REGULATORY INFORMATION

S. 302 (EHS)

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists Hazardous Components (Chemical Name)

			•	
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	No	No	No
NA	Halogenated Phosphate	No	No	No
NA	Proprietary Blowing Agent	No	No	No

CAS# **Hazardous Components (Chemical Name)** Other US EPA or State Lists

460-73-1 1,1,1,3,3-Pentafluoropropane {HFC-245fa} CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes -

> Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No

S. 304 RQ

CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes -NA Halogenated Phosphate

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GHS format

S. 313 (TRI)



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Inventory, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI

Air: No

NA Proprietary Blowing Agent CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA

PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No;

PA HSL: No; SC TAP: No; WI Air: No

CAS # Hazardous Components (Chemical Name) International Regulatory Lists

460-73-1 1,1,1,3,3-Pentafluoropropane {HFC-245fa} Canadian DSL: Yes; Canadian NDSL: No NA Proprietary Blowing Agent Canadian DSL: Yes; Canadian NDSL: No Canadian DSL: No; Canadian NDSL: No

Regulatory Information: This product contains no chemicals subject to the reporting requirements of section 313

of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 40

CFR part 372.

Regulatory Information

Statement:

16. OTHER INFORMATION

Revision Date: 04/30/2015

Additional Information About

This Product:

Company Policy or

Disclaimer:

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information, and recommendations or the suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED SWD EMPLOYEE SHALL PROVIDE, OR MAKE AVAILABLE, DATA SHEETS FOR SWD PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SWD. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET OR QUESTIONS REGARDING THIS DATA SHEET SHOULD BE DIRECTRED TO SWD AT 800-828-1394.



Quik-Shield A

Printed: 04/29/2015 Revision: 04/28/2015 Supersedes Revision: 02/03/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS A

Product Name: Quik-Shield A
Company Name: SWD URETHANE
539 S. Drew St.

Mesa, AZ 85210,

Web site address: www.swdurethane.com

Emergency Contact: CHEMTREC

(800) 424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 5
Skin Corrosion/Irritation, Category 2
Skin Sensitization, Category 1

Serious Eye Damage/Eye Irritation, Category 2B

Acute Toxicity: Inhalation, Category 4
Respiratory Sensitization, Category 1

Carcinogenicity, Category 2

Aquatic Toxicity (Acute), Category 2





GHS Signal Word: Danger

GHS Hazard Phrases: H303 - May be harmful if swallowed.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H320 - Causes eye irritation. H332 - Harmful if inhaled.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H351 - Suspected of causing cancer.

H401 - Toxic to aquatic life.

GHS Precaution Phrases: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash hands thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P284 - Wear respiratory protection .

P285 - In case of inadequate ventilation wear respiratory protection.

GHS Response Phrases: P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P341 - If breathing is difficult, remove to fresh air and keep at rest in a position

comfortable for breathing.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P308+313 - IF exposed or concerned: Get medical attention/advice. P332+313 - If skin irritation occurs, get medical advice/attention.

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Quik-Shield A

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P337+313 - If eye irritation persists, get medical advice/attention.

P342+311 - If experiencing respiratory symptoms call a POISON CENTER or

doctor/physician.

P362 - Take off contaminated clothing and wash before re-use.

GHS Storage and Disposal

Phrases:

P405 - Store locked up.

Potential Health Effects (Acute and Chronic):

Inhalation: Causes respiratory tract irritation.

Skin Contact: May be harmful if absorbed through the skin. Causes skin irritation.

Eye Contact: Causes eye irritation.

Ingestion: May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # Hazardous Components (Chemical Name) Concentration

101-68-8 Methylenebis(phenylisocyanate) {MBI; 30.0 -60.0 %

Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers 30.0 -60.0 %

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

In Case of Inhalation: If breathed in, move person into fresh air. If not breathing give artificial respiration.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

Signs and Symptoms Of

Exposure:

Cough, Shortness of breath, Headache. Nausea. Vomiting, Pulmonary edema. Effects

may be delayed.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area.

5. FIRE FIGHTING MEASURES

Flash Pt: > 150.00 C Method Used: Closed Cup

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: NA

Suitable Extinguishing Media:Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary.

Flammable Properties and

No data available.

Hazards:



VALE I I PATA VIIEE I Quik-Shield A

Printed: 04/29/2015 Revision: 04/28/2015 Supersedes Revision: 02/03/2014

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or

Personal precautions.

Spilled:

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure

adequate ventilation.

Environmental precautions. Do not let product enter drains.

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers

for disposal.

7. HANDLING AND STORAGE

Precautions To Be Taken in

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Handling:

Provide appropriate exhaust ventilation at places where dust is formed. Normal

measures for preventive fire protection.

Precautions To Be Taken in

Keep container tightly closed in a dry and well-ventilated place.

Storing:

Recommended storage temperature: 15 - 38 deg.C.

Store under inert gas. Moisture sensitive.

EXPOSURE CONTROLS/PERSONAL PROTECTION 8.

	CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
l	101-68-8	Methylenebis(phenylisocyanate) {MBI;	CEIL: 0.02 ppm	TLV: 0.005 ppm	No data.
l		Methylene diphenyl diisocyanate; MDI;			
l		Diphenylmethane-4,4'-diisocyanate}			
l	NA	MDI, mixed isomers	No data.	No data.	No data.

Respiratory Equipment

(Specify Type):

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN

Eye Protection: Face shield and safety glasses.

Protective Gloves: Handle with gloves.

Choose body protection according to the amount and concentration of the dangerous Other Protective Clothing:

substance at the work place.

Engineering Controls

(Ventilation etc.):

No data available.

Work/Hygienic/Maintenance

before breaks and at the end of workday.

Handle in accordance with good industrial hygiene and safety practice. Wash hands Practices:



Quik-Shield A

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor:Slightly. Musty.Melting Point:42.00 C - 45.00 C

Boiling Point: 200.00 C **Autoignition Pt:** NA

Flash Pt: > 150.00 C Method Used: Closed Cup

Explosive Limits: LEL: No data. UEL: No data.

Specific Gravity (Water = 1): No data.

Density: 1.18 G/CM3

Vapor Pressure (vs. Air or No data.

mm Hg):

Vapor Density (vs. Air = 1): No data.

Evaporation Rate: No data.

Solubility in Water: No data.

Percent Volatile: No data.

10. STABILITY AND REACTIVITY

Stability: Unstable [] Stable [X]

Conditions To Avoid - Contact with moisture, other materials that react with isocyanates, or temperatures abovr

Instability: 350 °F (177 °C), may cause polymerization.

Incompatibility - Materials To Water. Amines, Strong bases, Alcohols.

Avoid:

Hazardous Decomposition or formed under fire conditions. Carbon oxides,

Byproducts: nitrogen oxides (NOx).

Possibility of Hazardous

Reactions:

Will occur [] Will not occur [X]

O - -- - - | 141 - -- - T - A - -

Conditions To Avoid - No data available.

Hazardous Reactions:

11. TOXICOLOGICAL INFORMATION

Toxicological Information: No data available.

Irritation or Corrosion: Serious eye damage/eye irritation:

Eyes - rabbit - Moderate eye irritation.

Carcinogenicity/Other

Carcinogenicity.

Information:

This product is or contains a component that is not classifiable as to its carcinogenicity

based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies.

IARC: Group 3: Not classifiable as to its carcinogenicity to humans 3.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by OSHA.



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CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
101-68-8	Methylenebis(phenylisocyanate) {MBI; Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}	n.a.	3	n.a.	n.a.
NA	MDI, mixed isomers	n.a.	3	n.a.	n.a.

12. ECOLOGICAL INFORMATION

No data available.

Persistence and

No data available.

Degradability:

No data available. Bioaccumulative Potential: Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Product.

> Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an

afterburner and scrubber.

Contaminated packaging. Dispose of as unused product.

14. TRANSPORT INFORMATION

GHS Classification: Acute Toxicity: Oral, Category 5 - Warning! May be harmful if swallowed

Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation

Skin Sensitization, Category 1 - Warning! May cause an allergic skin reaction Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

Acute Toxicity: Inhalation, Category 4 - Warning! Harmful if inhaled

Respiratory Sensitization, Category 1 - Danger! May cause allergy or asthma symptoms

or breathing difficulties if inhaled

Carcinogenicity, Category 2 - Warning! Suspected of causing cancer

Aquatic Toxicity (Acute), Category 2 - Toxic to aquatic life

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Other regulated substances, Liquid, N.O.S. (Methylene Diphenyl Diisocyanate)

DOT Hazard Class: CLASS 9

NA3082 **UN/NA Number:** Ш **Packing Group:**



LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

UN Number: 3082 **Packing Group:** Ш

Hazard Class: 9 - CLASS 9 **TDG Classification:**

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.



Quik-Shield A

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AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI)

101-68-8 Methylenebis(phenylisocyanate) {MBI; No Yes 5000 LB Yes-Cat. N120

Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers No No Yes-Cat, N120

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists

101-68-8 Methylenebis(phenylisocyanate) {MBI; CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes -

Methylene diphenyl diisocyanate; MDI; Inventory, 8C; CA PROP.65: No; CA TAC, Title 8: TAC, Title Diphenylmethane-4,4'-diisocyanate} 8; MA Oil/HazMat: No; MI CMR, Part 5: Part 5; NC TAP: Yes;

NJ EHS: Yes - 1253; NY Part 597: Yes; PA HSL: Yes - E; SC

TAP: Yes; WI Air: Yes

MDI. mixed isomers

CAA HAP.ODC: No: C

CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -

Inventory, 8C, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes; NY Part 597: No; PA HSL: No; SC TAP: No;

WI Air: No

CAS # Hazardous Components (Chemical Name) International Regulatory Lists

101-68-8 Methylenebis(phenylisocyanate) {MBI; Canadian DSL: Yes; Canadian NDSL: No

Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers Canadian DSL: Yes; Canadian NDSL: No

Regulatory Information: This product contains chemicals subject to the reporting requirements of section 313 of

Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40

CFR part 372.

CAS# 101-68-8, Methylene diphenyl diisocyanate, MDI: 30 - 60%

CAS# n/a, MDI, mixed isomers: 30 - 60%

16. OTHER INFORMATION

Revision Date: 04/28/2015

Additional Information About No data available.

This Product:

NA

Company Policy or

Disclaimer:

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information, and recommendations or the suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED SWD EMPLOYEE



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SHALL PROVIDE, OR MAKE AVAILABLE, DATA SHEETS FOR SWD PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SWD. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET OR QUESTIONS REGARDING THIS DATA SHEET SHOULD BE DIRECTRED TO SWD AT 800-828-1394.



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1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS 125 B

Product Name: Quik-Shield 125 B **SWD URETHANE Company Name:** 539 S. Drew St.

Mesa, AZ 85210,

www.swdurethane.com Web site address:

Emergency Contact: CHEMTREC (800) 424-9300

HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 4 Acute Toxicity: Skin, Category 5 Skin Corrosion/Irritation, Category 3

Serious Eye Damage/Eye Irritation, Category 2B

Aquatic Toxicity (Acute), Category 3



GHS Signal Word: Warning

GHS Hazard Phrases: H302 - Harmful if swallowed.

H313 - May be harmful in contact with skin.

H316 - Causes mild skin irritation. H320 - Causes eve irritation. H402 - Harmful to aquatic life.

GHS Precaution Phrases: P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

GHS Response Phrases: No phrases apply. GHS Storage and Disposal

Phrases:

No phrases apply.

Potential Health Effects (Acute and Chronic):

Inhalation: Causes respiratory tract irritation. Harmful if inhaled. May cause narcotic effects in high

concentration. May cause lung damage. May cause anemia. May cause central nervous

system effects such as nausea and headache.

Skin Contact: Causes skin irritation. Harmful if absorbed through the skin. Substance is rapidly

> absorbed through the skin. Causes symptoms similar to those of inhalation. A skin notation is not recommended by ACGIH, based on estimates from physiologically based pharmacokinetic models which indicate that, even in worst-case dermal-exposure scenarios, 2-butoxyethanol is not absorbed in amounts sufficient to cause red blood cell

hemolysis in humans.

Causes eye irritation. Causes eye irritation. Causes redness and pain. Contact with eyes Eye Contact:

may cause severe irritation, and possible eye burns. Lachrymator (substance which

increases the flow of tears).

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. May cause

gastrointestinal irritation with nausea, vomiting and diarrhea. May cause burns to the

digestive tract.



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3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # Hazardous Components (Chemical Name) Concentration

 NA
 Halogenated Phosphate
 10.0 -20.0 %

 460-73-1
 1,1,1,3,3-Pentafluoropropane {HFC-245fa}
 5.0 -10.0 %

 NA
 Glycol ether
 < 5.0 %</td>

 NA
 Amine catalyst
 < 3.0 %</td>

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

In Case of Inhalation: If breathed in, move person into fresh air. Get medical aid immediately. Remove from

exposure and move to fresh air immediately. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

If not breathing, give artificial respiration.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician. Get medical aid

immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid. Wash clothing before reuse. Destroy

contaminated shoes.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep

eyes closed. Extensive irrigation with water is required (at least 30 minutes).

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician. Do NOT induce vomiting. Get medical aid immediately. Call a

poison control center.

Signs and Symptoms Of

Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have

not been thoroughly investigated.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area. Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

Suitable Extinguishing Media:Use water spray, dry chemical, carbon dioxide, or chemical foam. Do NOT get water

inside containers. For large fires, use water spray, fog, or alcohol-resistant foam.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary. As in any fire, wear

a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may

be heavier than air.

Flammable Properties and

Hazards:

No data available.

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6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled: Personal precautions.

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions.

Do not let product enter drains.

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment. Do not flush into a sewer. Do not get water inside containers.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:

Avoid inhalation of vapor or mist.

Normal measures for preventive fire protection. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation.

Precautions To Be Taken in Storing:

Keep container tightly closed in a dry and well-ventilated place. Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Store protected from light.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	Halogenated Phosphate	No data.	No data.	No data.
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	No data.	No data.	No data.
NA	Glycol ether	PEL: 50 ppm	TLV: 20 ppm	No data.
NA	Amine catalyst	No data.	No data.	No data.

Respiratory Equipment (Specify Type):

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Eye Protection:

Face shield and safety glasses. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves:

Handle with gloves. Wear appropriate protective gloves to prevent skin exposure.

Choose body protection according to the amount and concentration of the dangerous

Other Protective Clothing:

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substance at the work place. Wear appropriate protective clothing to prevent skin

exposure.

Engineering Controls

(Ventilation etc.):

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood. Use adequate general or local exhaust ventilation to keep airborne

concentrations below the permissible exposure limits.

Work/Hygienic/Maintenance

Practices:

Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end of workday.

	SICAL A	ND CHEMICAL	PROPERTIES
3. PH 13	JICAL A	ND CHEMICAL	PROPERTIES

[] Gas [X] Liquid Physical States: [] Solid

Appearance and Odor: Viscous.

Musty.

Melting Point: No data. **Boiling Point:** No data. Autoignition Pt: No data. No data. Flash Pt:

LEL: No data. Explosive Limits: UEL: No data.

Specific Gravity (Water = 1): No data. Vapor Pressure (vs. Air or

mm Hg):

No data.

Vapor Density (vs. Air = 1): No data. **Evaporation Rate:** No data. Solubility in Water: No data. Percent Volatile: No data.

10. STABILITY AND REACTIVITY

Stability: Unstable [] Stable [X]

Conditions To Avoid -No data available.

Instability: Incompatible materials, ignition sources.

Incompatibility - Materials To Strong oxidizing agents, Strong bases, Aluminum, Copper, Copper alloys, Zinc, acids.

Avoid:

Hazardous Decomposition or formed under fire conditions. Carbon oxides, Byproducts: Phosphorous oxides, Hydrogen chloride gas,

Thermal decomposition 244 °C Carbon monoxide, Nitrogen oxides, Carbon dioxide.

Possibility of Hazardous

Reactions:

Will occur [] Will not occur [X]

Conditions To Avoid -

No data available.

Hazardous Reactions:



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11. TOXICOLOGICAL INFORMATION

Toxicological Information: Epidemiology: No information found.

Teratogenicity: No information available. Mutagenicity: Neurotoxicity: No information

available.
Other Studies:
CAS# NA:

Acute toxicity, LD50, Oral, Rat, 3600. MG/KG.

Results:

Behavioral: Somnolence (general depressed activity).

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Other changes.

- National Technical Information Service, Vol/p/yr: OTS05, 7713

Acute toxicity, LD50, Intravenous, Mouse, 56.00 MG/KG.

Results:

Behavioral: Food intake (animal).

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

- U.S. Army Armament Research & Development Command, Chemical Systems Laboratory, NIOSH Exchange Chemicals., Aberdeen Proving Ground,, Aberdeen

Proving Ground, MD 21010, Vol/p/yr: NX#, 5768

Skin corrosion/irritation, Skin sensitization, Skin, Rabbit, 0.000, Mild.

Results:

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation.

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Cyanosis.

Skin - rabbit - Mild skin irritation - 24 h. Serious eye damage/eye irritation:

Eyes - rabbit - Mild eye irritation.

Carcinogenicity/Other

Irritation or Corrosion:

Information:

Carcinogenicity.

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. CAS# 111-76-2: ACGIH: A3

- Confirmed animal carcinogen with unknown relevance to humans.

California: Not listed. NTP: Not listed.

IARC: Not listed. CAS# 108-01-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
NA	Halogenated Phosphate	n.a.	n.a.	n.a.	n.a.
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	n.a.	n.a.	n.a.	n.a.
NA	Glycol ether	n.a.	3	A3	n.a.
l NA	Amine catalyst	n a	n a	n a	n a

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12. ECOLOGICAL INFORMATION

General Ecological Information:

Environmental: TERRESTRIAL FATE: Based on a recommended classification scheme, an estimated Koc value of 67,, determined from an experimental log Kow and a recommended regression-derived equation, indicates that ethylene glycol mono-n-butyl ether is expected to have high mobility in soil. An estimated BCF value of 2.5 was calculated for ethylene glycol mono-n-butyl ether, using an experimental log Kow of 0.83 and a recommended regression-derived equation. According to a recommended classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low.

Physical: No information found.

Other: An estimated BCF value of 2.5,, from an experimental log Kow, suggests that ethylene glycol mono-n-butyl ether bioconcentration in aquatic organisms will be low,

according to a recommended classification scheme.

Persistence and

Degradability:

No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Product.

Observe all federal, state, and local environmental regulations. Contact a licensed

professional waste disposal service to dispose of this material.

Contaminated packaging.

Dispose of as unused product. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. RCRA P-Series: None listed.

RCRA U-Series: None listed.

14. TRANSPORT INFORMATION

GHS Classification: Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed

Acute Toxicity: Skin, Category 5 - Warning! May be harmful in contact with skin Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation

Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

Aquatic Toxicity (Acute), Category 3 - Harmful to aquatic life

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class: UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

UN Number: Hazard Class:

TDG Classification:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.



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15. REGULATORY INFORMATION

	13. NEGOLATOI	VI IIVI OIVIIA		
EPA SARA (S	Superfund Amendments and Reauthorization Act	of 1986) Lists		
CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
NA	Halogenated Phosphate	No	No	No
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	No	No	No
NA	Glycol ether	No	No	Yes-Cat. N230
NA	Amine catalyst	No	No	No
CAS#	Hazardous Components (Chemical Name)	Other US EPA o	r State Lists	
NA	Halogenated Phosphate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No		
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No		
NA	Glycol ether	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NC TAP: Yes - Cat.; NJ EHS: Yes; NY Part 597: No; PA HSL: Yes - 1; SC TAP: Yes - Cat.; WI Air: Yes		
NA	Amine catalyst	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: Yes; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes; NY Part 597: No; PA HSL: Yes - 1; SC TAP: No; WI Air: No		
CAS#	Hazardous Components (Chemical Name)	International Re	gulatory Lists	
NA	Halogenated Phosphate	Canadian DSL: \	es; Canadian NDS	SL: No
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	Canadian DSL: \	es; Canadian NDS	SL: No
NA	Glycol ether	Canadian DSL: \	es; Canadian NDS	SL: No
NA	Amine catalyst	Canadian DSL: \	es; Canadian NDS	SL: No

Regulatory Information: This product conf

This product contains chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372.

CAS# n/a, Glycol Ether: <5.0%



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16. OTHER INFORMATION

Revision Date: 04/30/2015

Additional Information About No data available.

This Product:

Company Policy or Disclaimer:

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information, and recommendations or the suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED SWD EMPLOYEE SHALL PROVIDE, OR MAKE AVAILABLE, DATA SHEETS FOR SWD PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SWD. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET OR QUESTIONS REGARDING THIS DATA SHEET SHOULD BE DIRECTRED TO SWD AT 800-828-1394.



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Supersedes Revision: 03/31/2014

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE

1.1 Product Code: QS 450 B

Product Name: Quik-Shield 450 B

- 1.2 Relevant identified uses of the substance or mixture and uses advised against:
- 1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: SWD URETHANE

539 S. Drew St. Mesa, AZ 85210,

Web site address: www.swdurethane.com

1.4 Emergency telephone number:

Emergency Contact: CHEMTREC

(800) 424-9300

SECTION 2. HAZARDS IDENTIFICATION

- 2.1 Classification of the Substance or Mixture:
- 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:

Acute Toxicity: Oral, Category 4
Acute Toxicity: Skin, Category 5

Skin Corrosion/Irritation, Category 3

Serious Eye Damage/Eye Irritation, Category 2B

Aquatic Toxicity (Acute), Category 3

2.1.2 Classification according to Directive 1999/45/EC:

Xn: Harmful

F: Highly Flammable

Risk Phrases: R11, R20, R52/53

For full text of R- phrases: see SECTION 15.

- 2.2 Label Elements:
- 2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:



GHS Signal Word: Warning

GHS Hazard Phrases:

H302 - Harmful if swallowed.

H313 - May be harmful in contact with skin.

H316 - Causes mild skin irritation.

H320 - Causes eye irritation.

H402 - Harmful to aquatic life.

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GHS Precaution Phrases:

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

GHS Response Phrases:

No phrases apply.

GHS Storage and Disposal Phrases:

No phrases apply.

2.2.2 Labeling according to Directive 1999/45/EC:





Xn

F

2.3 Adverse Human Health

Effects and Symptoms:

2.3.1 Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. May cause narcotic effects

in high concentration. Eye irritation, vertigo, and nausea were reported in humans

exposed at 2200 ppm.

2.3.2 Skin Contact: May be harmful if absorbed through the skin. Causes skin irritation. Causes moderate

skin irritation. May cause dermatitis.

2.3.3 Eye Contact: Causes eye irritation. Causes moderate eye irritation.

2.3.4 Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and

diarrhea. May cause central nervous system depression.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

				I L DI L I I I I
CAS#	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	Risk Phrases/ GHS Classification
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	0.0 -13.0 %	NA NA	No phrases apply. Eye Damage 2A: H319
NA	Halogenated Phosphate	7.0 -13.0 %	NA NA	No phrases apply. Acute Tox.(O) 4: H302
NA	Halogenated polyester	< 7.0 %	NA NA	No phrases apply. Aquatic (C) 3: H412
156-60-5	Trans-1,2-Dichloroethylene {1,2-trans-Dichloroethylene; Ethene, 1,2-dichloro-, (E)-}	1.0 -3.0 %	205-860-2 602-026-00-3	F;Xn; R11-20-52/53 Flam. Liq. 2: H225 Acute Tox.(I) 4: H332 Aquatic (C) 3: H412

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SECTION 4. FIRST AID MEASURES

4.1 Description of First Aid

Measures:

In Case of Inhalation: If breathed in, move person into fresh air. If inhaled, remove to fresh air. If not breathing,

give artificial respiration. Get medical aid.

In Case of Skin Wash off with soap and plenty of water. Consult a physician. In case of contact, flush

Contact: skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if

irritation develops and persists. Wash clothing before reuse.

In Case of Eye Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. In

Contact: case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get

medical aid.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician. Get medical aid.

4.2 Important Symptoms To the best of our knowledge, the chemical, physical, and toxicological properties have

and Effects, Both not been thoroughly investigated.

Acute and Delayed:

Note for the Doctor: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area. Treat symptomatically and supportively.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Suitable Extinguishing Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

Media:

5.2 Flammable Properties No data available.

and Hazards:

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

5.3 Fire Fighting Wear self contained breathing apparatus for fire fighting if necessary. As in any fire, wear

Instructions: a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or

equivalent), and full protective gear. Vapors may form explosive mixtures with air. Use water spray to keep fire-exposed containers cool. Flammable liquid and vapor. Fire or excessive heat may result in violent rupture of the container due to bulk polymerization. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors

can spread along the ground and collect in low or confined areas.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Protective Precautions, No data available.

Protective Equipment and Emergency

Procedures:

6.2 Environmental No data available.

Precautions:

6.3 Methods and Material Personal precautions.

For Containment and Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure

Cleaning Up: adequate ventilation.

Environmental precautions.

Do not let product enter drains.

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Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions To Be

Avoid inhalation of vapor or mist.

Taken in Handling:

Normal measures for preventive fire protection. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Pure vapor will be uninhibited and may polymerize in vents or other confined spaces.

7.2 Precautions To Be Taken in Storing:

Keep container tightly closed in a dry and well-ventilated place. Keep away from sources of ignition. Store in a tightly closed container. Flammables-area. Store protected from light and air.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Parameters:

II .				
CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	No data.	No data.	No data.
NA	Halogenated Phosphate	No data.	No data.	No data.
NA	Halogenated polyester	No data.	No data.	No data.
156-60-5	Trans-1,2-Dichloroethylene {1,2-trans-Dichloroethylene; Ethene, 1,2-dichloro-, (E)-}	No data.	No data.	No data.
CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	No data.	No data.	No data.
NA	Halogenated Phosphate	No data.	No data.	No data.
NA	Halogenated polyester	No data.	No data.	No data.
156-60-5	Trans-1,2-Dichloroethylene {1,2-trans-Dichloroethylene; Ethene, 1,2-dichloro-, (E)-}	No data.	TLV: 200 ppm	No data.

8.2 Exposure Controls:

8.2.1 Engineering Controls (Ventilation etc.):

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

8.2.2 Personal protection equipment:

Eye Protection: Face shield and safety glasses. Wear chemical splash goggles.

Protective Gloves: Handle with gloves. Wear appropriate protective gloves to prevent skin exposure.

Other Protective Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear appropriate protective clothing to prevent skin

exposure.

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Respiratory Equipment Where risk assessment shows air-purifying respirators are appropriate use a full-face

(Specify Type): respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator

cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European

Standard EN 149.

Work/Hygienic/Mainten Handle in accordance with good industrial hygiene and safety practice. Wash hands

ance Practices: before breaks and at the end of workday.

No data available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Viscous. Musty.

No data.

Melting Point:No data.Boiling Point:No data.Flash Pt:No data.Evaporation Rate:No data.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure (vs. Air or

Appearance and Odor:

mm Hg):

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Autoignition Pt: No data.

9.2 Other Information

Percent Volatile: No data.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity: No data available.

10.2 Stability: Unstable [] Stable [X]

10.3 Conditions To Avoid - No data available.

Hazardous Reactions:

Possibility of Will occur [] Will not occur [X]

Hazardous Reactions:

10.4 Conditions To Avoid - No data available.

Instability: Light, ignition sources, Exposure to air.

10.5 Incompatibility - Strong oxidizing agents, Strong bases, Copper.

Materials To Avoid:

10.6 Hazardous formed under fire conditions. Carbon oxides,Decomposition or Phosphorous oxides, Hydrogen chloride gas,

Byproducts: Thermal decomposition 244 °C Hydrogen chloride, phosgene, Carbon monoxide.

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SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on

Epidemiology: No data available. **Toxicological Effects:** Teratogenicity: No data available.

Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies:

CAS# NA:

Acute toxicity, LD50, Oral, Rat, 3600. MG/KG.

Results:

Behavioral: Somnolence (general depressed activity).

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Other changes.

- National Technical Information Service, Vol/p/yr: OTS05, 7713

Acute toxicity, LD50, Intravenous, Mouse, 56.00 MG/KG.

Results:

Behavioral: Food intake (animal).

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

- U.S. Army Armament Research & Development Command, Chemical Systems Laboratory, NIOSH Exchange Chemicals., Aberdeen Proving Ground,, Aberdeen Proving Ground, MD 21010, Vol/p/yr: NX#, 5768

Skin corrosion/irritation, Skin sensitization, Skin, Rabbit, 0.000, Mild.

Results:

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation.

Behavioral: Tremor.

Lungs, Thorax, or Respiration:Cyanosis.

CAS# 156-60-5:

Reproductive Effects:, TCLo, Inhalation, Rat, 6000. PPM, 6 H, female 7-16 day(s) after conception.

Results:

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

- Fundamental and Applied Toxicology., Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 20,225, 1993

Reproductive Effects:, TCLo, Inhalation, Rat, 12000. PPM, 6 H, female 7-16 day(s) after conception.

Results:

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

- Fundamental and Applied Toxicology., Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 20,225, 1993

Mutagenicity:, Mutation test: Mutation in microorganisms., 50.00 UG/PLAT, Bacteria -Salmonella typhimurium,.

Results:

Behavioral: Sleep.

Behavioral: Hallucinations, distorted perceptions.

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- Toxicological and Environmental Chemistry., Gordon & Breach Science Pub. Inc., New York, NY, Vol/p/yr: 15,101, 1987

Mutagenicity:, Gene conversion and mitotic recombination., 80.00 MMOL/L, Saccharomyces cerevisiae.

Results:

Behavioral: Coma.

Lungs, Thorax, or Respiration: Dyspnea.

Nutritional and Gross Metabolic: Changes in: Metabolic acidosis.

- Teratogenesis, Carcinogenesis, and Mutagenesis., Alan R. Liss, Inc., 41 E. 11th St., New York, NY 10003, Vol/p/yr: 4,365, 1984

Mutagenicity:, Mutation test: DNA damage., 22.00 MMOL/L, Saccharomyces cerevisiae.

Results:

Behavioral: Coma.

Vascular: BP lowering not charactertized in autonomic section. Nutritional and Gross Metabolic:Changes in:Metabolic acidosis.

- Mutation Research., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam Netherlands, Vol/p/yr: 206,209, 1988

Mutagenicity:, Sex chromosome loss and nondisjunction, 51500. UMOL/L, Saccharomyces cerevisiae.

Results:

Gastrointestinal: Nausea or vomiting.

- Mutation Research., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam Netherlands, Vol/p/yr: 206,209, 1988

Mutagenicity:, Sex chromosome loss and nondisjunction, Species: Hamster, 6500. UMOL/L, Cell Type: lung..

Results:

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes.

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Other.

Lungs, Thorax, or Respiration:Other changes.

- Mutation Research., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam Netherlands, Vol/p/yr: 182,135, 1987

Other Studies:, TDLo, Oral, Rat, 113.0 GM/KG, 90 D.

Results:

Kidney, Ureter, Bladder: Changes in bladder weight.

- Journal of the American College of Toxicology., Mary Ann Liebert, Inc., New York, NY, Vol/p/yr: 6(4),471, 1987

Other Studies:, TCLo, Inhalation, Rat, 200.0 PPM, 8 W.

Results:

Lungs, Thorax, or Respiration:Other changes.

Liver: Other changes.

Endocrine: Changes in endocrine weight (unspecified).

- Toxicology., Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick Ireland, Vol/p/yr: 7(2),141, 1977

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Acute toxicity, TCLo, Inhalation, Human, 4800. MG/M3, 10 M.

Results:

Behavioral: Sleep.

Behavioral: Hallucinations, distorted perceptions.

- Archiv fuer Hygiene und Bakteriologie., For publisher information, see ZHPMAT,

Munich Fed. Rep. Ger., Vol/p/yr: 116,131, 1936

Acute toxicity, LD50, Oral, Rat, 1235. MG/KG.

Results:

Cardiac:Other changes.

Lungs, Thorax, or Respiration:Other changes.

Liver: Fatty liver degeneration.

- Toxicology., Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick Ireland, Vol/p/yr:

7,141, 1977

Acute toxicity, LD50, Intraperitoneal, Rat, 7411. MG/KG.

Results:

Cardiac:Other changes.

Lungs, Thorax, or Respiration:Other changes.

Liver: Fatty liver degeneration.

- Toxicology., Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick Ireland, Vol/p/yr:

7,141, 1977

Acute toxicity, LD50, Oral, Mouse, 2122. MG/KG.

Results:

Behavioral: Altered sleep time (including change in righting reflex).

Behavioral: Somnolence (general depressed activity).

Behavioral: Ataxia.

- Drug and Chemical Toxicology., Marcel Dekker, 270 Madison Ave., New York, NY

10016, Vol/p/yr: 8,373, 1985

Acute toxicity, LCLO, Inhalation, Mouse, 75.00 GM/M3, 2 H.

Results:

Behavioral: General anesthetic.

Behavioral: Convulsions or effect on seizure threshold.

Lungs, Thorax, or Respiration: Dyspnea.

- Archiv fuer Hygiene und Bakteriologie., For publisher information, see ZHPMAT,

Munich Fed. Rep. Ger., Vol/p/yr: 116,131, 1936

Acute toxicity, LD50, Intraperitoneal, Mouse, 3952. MG/KG.

Results:

Behavioral: General anesthetic.

Behavioral: Convulsions or effect on seizure threshold.

Gastrointestinal:Nausea or vomiting.

- Toxicology., Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick Ireland, Vol/p/yr:

7,141, 1977

Acute toxicity, LCLO, Inhalation, Species: Cat, 43.00 GM/M3, 6 H.

Results:

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Behavioral: General anesthetic.

Behavioral: Convulsions or effect on seizure threshold.

Gastrointestinal: Nausea or vomiting.

- Archiv fuer Hygiene und Bakteriologie., For publisher information, see ZHPMAT,

Munich Fed. Rep. Ger., Vol/p/yr: 116,131, 1936

Acute toxicity, LD50, Skin, Species: Rabbit, > 5.000 GM/KG.

Results:

Skin and Appendages: Skin: After systemic exposure: Dermatitis, irritative.

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

- Acute Toxicity Data. Journal of the American College of Toxicology, Part B., Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128, Vol/p/yr: 1,10, 1990

Standard Draize Test, Skin, Species: Rabbit, 500.0 MG, 24 H.

Results:

Effects on Newborn: Growth statistics (e.g., reduced weight gain).

- Acute Toxicity Data, Journal of the American College of Toxicology, Part B., Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128, Vol/p/yr: 1,11, 1990

Standard Draize Test, Eyes, Species: Rabbit, 10.00 MG.

Results:

Behavioral: Sleep.

Behavioral: Hallucinations, distorted perceptions.

- Acute Toxicity Data. Journal of the American College of Toxicology, Part B., Mary Ann

Liebert, Inc., 1651 Third Ave., New York, NY 10128, Vol/p/yr: 1,11, 1990

Irritation or Corrosion: Skin - rabbit - Mild skin irritation - 24 h.

Serious eye damage/eye irritation: Eyes - rabbit - Mild eye irritation.

Carcinogenicity/Other Carcinogenicity.

Information:

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. CAS# 156-60-5: Not listed

by ACGIH, IARC, NTP, or CA Prop 65.

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	n.a.	n.a.	n.a.	n.a.
NA	Halogenated Phosphate	n.a.	n.a.	n.a.	n.a.
NA	Halogenated polyester	n.a.	n.a.	n.a.	n.a.
156-60-5	Trans-1,2-Dichloroethylene {1,2-trans-Dichloroethylene; Ethene, 1,2-dichloro-, (E)-}	n.a.	n.a.	n.a.	n.a.

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SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity: No data available.12.2 Persistence and No data available.

Degradability:

12.3 Bioaccumulative

No data available.

Potential:

12.4 Mobility in Soil: No data available.12.5 Results of PBT and No data available.

vPvB assessment:

12.6 Other adverse effects: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Product.

Method: Observe all federal, state, and local environmental regulations. Contact a licensed

professional waste disposal service to dispose of this material.

Contaminated packaging.

Dispose of as unused product. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. RCRA P-Series: None listed.

RCRA U-Series:

CAS# 156-60-5: waste number U079.

SECTION 14. TRANSPORT INFORMATION

GHS Classification: Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed

Acute Toxicity: Skin, Category 5 - Warning! May be harmful in contact with skin

Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation

Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

Aquatic Toxicity (Acute), Category 3 - Harmful to aquatic life

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class: UN/NA Number:

14.1 LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

UN Number:

Hazard Class: TDG Classification:

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name:

UN Number: Hazard Class:

14.2 MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

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14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

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SECTION 15.	REGUL	AIURI	INFORMATION

SECTION 15. REGULATORY INFORMATION				
EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists				
CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	No	No	No
NA	Halogenated Phosphate	No	No	No
NA	Halogenated polyester	No	No	No
156-60-5	Trans-1,2-Dichloroethylene {1,2-trans-Dichloroethylene; Ethene, 1,2-dichloro-, (E)-}	No	Yes 1000 LB	No
CAS#	Hazardous Components (Chemical Name)	Canadian NPRI	Canadian IDL	Canadian DSL
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	No	No	Yes
NA	Halogenated Phosphate	No	No	Yes
NA	Halogenated polyester	No	No	Yes
156-60-5	Trans-1,2-Dichloroethylene {1,2-trans-Dichloroethylene; Ethene, 1,2-dichloro-, (E)-}	No	No	Yes
CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists		
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No		
NA	Halogenated Phosphate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No		
NA	Halogenated polyester	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No		
156-60-5	Trans-1,2-Dichloroethylene {1,2-trans-Dichloroethylene; Ethene, 1,2-dichloro-, (E)-}	CAA HAP,ODC: No; CWA NPDES: Yes; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NC TAP: No; NJ EHS: No; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: No; WI Air: No		
CAS#	Hazardous Components (Chemical Name)	International Reg	julatory Lists	
460-73-1	1,1,1,3,3-Pentafluoropropane {HFC-245fa}			

Halogenated Phosphate

{1,2-trans-Dichloroethylene; Ethene,

Halogenated polyester
Trans-1,2-Dichloroethylene

1,2-dichloro-, (E)-}

NA

NA

156-60-5



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Canadian WHMIS Classification:





CLASS B, DIVISION 2: Flammable Liquids

CLASS D, DIVISION 2, SUBDIVISION B: Toxic Materials (Mutagenicity, skin sensitization, irritation, etc.)

European Community Hazard Symbol codes:





Xn

European Community Risk and Safety Phrases:

R11 Highly flammable.
R20 Harmful by inhalation.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

S16 Keep away from sources of ignition.

S29 Do not empty into drains.S7 Keep container tightly closed.

S61 Avoid release to the environment. Refer to special instructions / safety data sheets.

Regulatory Information: This product contains no chemicals subject to the reporting requirements of section 313

of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 40

CFR part 372.

SECTION 16. OTHER INFORMATION

Revision Date: 04/30/2015

Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information, and recommendations or the suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED SWD EMPLOYEE SHALL PROVIDE, OR MAKE AVAILABLE, DATA SHEETS FOR SWD PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SWD. ALL REQUESTS FOR

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PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET OR
QUESTIONS REGARDING THIS DATA SHEET SHOULD BE DIRECTRED TO SWD AT
800-828-1394.



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Supersedes Revision: 01/05/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS A

Product Name: Quik-Shield A
Company Name: SWD URETHANE
539 S. Drew St.

539 S. Drew St. Mesa, AZ 85210,

Web site address: www.swdurethane.com

Emergency Contact: CHEMTREC (800) 424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 5
Skin Corrosion/Irritation, Category 2
Skin Sensitization, Category 1

Serious Eye Damage/Eye Irritation, Category 2B

Acute Toxicity: Inhalation, Category 4
Respiratory Sensitization, Category 1

Carcinogenicity, Category 2





GHS Signal Word: Danger

GHS Hazard Phrases: H303 - May be harmful if swallowed.

H315 - Causes skin irritation.

H317 - Health Hazards: Suspected of causing cancer. May cause damage to organs

through prolonged or repeated exposure.

H320 - Causes eye irritation. H332 - Harmful if inhaled.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H351 - Suspected of causing cancer.

H401 - Toxic to aquatic life.

GHS Precaution Phrases: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash hands thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P284 - Wear respiratory protection .

P285 - In case of inadequate ventilation wear respiratory protection.

GHS Response Phrases: P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P341 - If breathing is difficult, remove to fresh air and keep at rest in a position

comfortable for breathing.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P308+313 - IF exposed or concerned: Get medical attention/advice. P332+313 - If skin irritation occurs, get medical advice/attention.

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P337+313 - If eye irritation persists, get medical advice/attention.

P342+311 - If experiencing respiratory symptoms call a POISON CENTER or

doctor/physician.

P362 - Take off contaminated clothing and wash before re-use.

GHS Storage and Disposal

P405 - Store locked up.

Phrases:

Inhalation: Causes respiratory tract irritation.

Skin Contact: May be harmful if absorbed through the skin. Causes skin irritation.

Eve Contact: Causes eye irritation.

Ingestion: May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # Hazardous Components (Chemical Name) Concentration

101-68-8 Methylenebis(phenylisocyanate) {MBI; 30.0 -60.0 %

Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers 30.0 -60.0 %

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

In Case of Inhalation: If breathed in, move person into fresh air. If not breathing give artificial respiration.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

Signs and Symptoms Of

was a dala

Exposure:

Cough, Shortness of breath, Headache. Nausea. Vomiting, Pulmonary edema. Effects

may be delayed.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area.

5. FIRE FIGHTING MEASURES

Flash Pt: > 150.00 C Method Used: Closed Cup
Explosive Limits: UEL: UEL:

Autoignition Pt: NA

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary.

Flammable Properties and

Hazards:

Hazardous Combustion

Products:

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6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case

Material Is Released Or

Spilled:

Personal precautions.

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure

adequate ventilation.

Environmental precautions. Do not let product enter drains.

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers

for disposal.

7. HANDLING AND STORAGE

Precautions To Be Taken in

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Handling:

Provide appropriate exhaust ventilation at places where dust is formed. Normal

measures for preventive fire protection.

Precautions To Be Taken in

Keep container tightly closed in a dry and well-ventilated place.

Storing:

Recommended storage temperature: 15 - 38 deg.C.

Store under inert gas. Moisture sensitive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Partial Chemical Name CAS# **OSHA TWA ACGIH TWA Other Limits**

Methylenebis(phenylisocyanate) {MBI; CEIL: 0.02 ppm TLV: 0.005 ppm 101-68-8

> Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers

Respiratory Equipment

(Specify Type):

When the product is sprayed or heated without adequate ventilation, an approved MSHA/NIOSH positive-pressure, supplied air respirator may be required. Air purifying respirators equipped with organic vapor cartridges and HEPA (P100) particulate filter may be used under certain conditions when the cartridge change-out schedule has been developed in accordance with the OSHA respiratory protection standard (29 CFR

1910.134).

Eye Protection: Face shield and safety glasses.

Protective Gloves: Handle with gloves.

Other Protective Clothing: Choose body protection according to the amount and concentration of the dangerous

substance at the work place.

Engineering Controls

(Ventilation etc.):

Practices:

Work/Hygienic/Maintenance Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end of workday.

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9.	PHYSICAL AND CHEMICAL PROPERTIES
Physical States:	[] Gas [X] Liquid [] Solid
Appearance and Odor:	Slightly. Musty.
oH:	
Melting Point:	42.00 C - 45.00 C
Boiling Point:	200.00 C
Flash Pt:	> 150.00 C Method Used: Closed Cup
Evaporation Rate:	
Flammability (solid, gas):	
Explosive Limits:	LEL: UEL:
/apor Pressure (vs. Air or	1
nm Hg):	
/apor Density (vs. Air = 1):	
Specific Gravity (Water = 1):	
Density:	1.18 G/CM3
Solubility in Water:	
Octanol/Water Partition	
Coefficient:	A14
Autoignition Pt:	NA
Decomposition Temperature:	
/iscosity:	
	10. STABILITY AND REACTIVITY
Stability:	Unstable [] Stable [X]
Conditions To Avoid -	Contact with moisture, other materials that react with isocyanates, or temperatures above
nstability:	350 °F (177 °C), may cause polymerization.
ncompatibility - Materials To	Water Amines Strong bases Alcohols

Hazardous Decomposition or formed under fire conditions. Carbon oxides,

nitrogen oxides (NOx). Byproducts:

Possibility of Hazardous Will occur [] Will not occur [X]

Reactions:

Conditions To Avoid -Hazardous Reactions:

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11. TOXICOLOGICAL INFORMATION

Toxicological Information:

Irritation or Corrosion: Serious eye damage/eye irritation:

Eyes - rabbit - Moderate eye irritation.

Carcinogenicity/Other

Information:

Carcinogenicity.

This product is or contains a component that is not classifiable as to its carcinogenicity

based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies.

IARC: Group 3: Not classifiable as to its carcinogenicity to humans 3.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by OSHA.

CAS # Hazardous Components (Chemical Name) NTP IARC ACGIH OSHA

101-68-8 Methylenebis(phenylisocyanate) {MBI; Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

3

NA MDI, mixed isomers

12. ECOLOGICAL INFORMATION

Persistence and

Degradability:

No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Product.

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an

afterburner and scrubber.

Contaminated packaging.

Dispose of as unused product.

14. TRANSPORT INFORMATION

GHS Classification: Acute Toxicity: Oral, Category 5 - Warning! May be harmful if swallowed

Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation

Skin Sensitization, Category 1 - Warning! May cause an allergic skin reaction Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

Acute Toxicity: Inhalation, Category 4 - Warning! Harmful if inhaled

Respiratory Sensitization, Category 1 - Danger! May cause allergy or asthma symptoms

or breathing difficulties if inhaled

Carcinogenicity, Category 2 - Warning! Suspected of causing cancer

Aquatic Toxicity (Acute), Category 2 - Toxic to aquatic life

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LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Other regulated substances, Liquid, N.O.S. (Methylene Diphenyl Diisocyanate)

DOT Hazard Class: 9 CLASS 9

UN/NA Number: NA3082 Packing Group: III

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

UN Number: 3082 Packing Group: III

Hazard Class: 9 - CLASS 9 TDG Classification:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

Additional Transport Containers shipped with less than 20,000 LBS are classified as Non-Hazardous.

Information:

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI)

101-68-8 Methylenebis(phenylisocyanate) {MBI; No Yes 5000 LB Yes-Cat. N120

Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers No No Yes-Cat. N120

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists

101-68-8 Methylenebis(phenylisocyanate) {MBI; CAA HAP, ODC: HAP; CWA NPDES: No; TSCA: Yes -

Methylene diphenyl diisocyanate; MDI; Inventory, 8C; CA PROP.65: No; CA TAC, Title 8: TAC, Title Diphenylmethane-4,4'-diisocyanate} 8; MA Oil/HazMat: No; MI CMR, Part 5: Part 5; NC TAP: Yes;

NJ EHS: Yes - Cat.; NY Part 597: Yes; PA HSL: Yes - E; SC

TAP: Yes; WI Air: Yes

NA MDI, mixed isomers CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -

Inventory, 8C, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - Cat.; NY Part 597: No; PA HSL: No; SC TAP:

No; WI Air: No

CAS # Hazardous Components (Chemical Name) International Regulatory Lists

101-68-8 Methylenebis(phenylisocyanate) {MBI; Canadian DSL: Yes; Canadian NDSL: No

Methylene diphenyl diisocyanate; MDI; Diphenylmethane-4,4'-diisocyanate}

NA MDI, mixed isomers Canadian DSL: Yes; Canadian NDSL: No

Regulatory Information: This product contains chemicals subject to the reporting requirements of section 313 of

Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40

CFR part 372.

Incipient fire responders should wear eye protection. Firefighters must wear

Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible,

prevent runoff water from entering storm drains, bodies of water, or other

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environmentally sensitve areas.

Incipient fire responders should wear eye protection. Firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitve areas.

16. OTHER INFORMATION

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Additional Information About

This Product:

Company Policy or

Disclaimer:

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