

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 09/01/2015 Date of issue: 08/05/2015

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier Product Form: Mixture Product Name: MWS-150 Synonyms: Emulsion

1.2. Intended Use of the Product Use of the substance/mixture: Asphalt.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Russell Standard / Hammaker East

285 Kappa Drive

Suite 300 Pittsburgh, PA 15238

T: (800) 323-3053

www.russellstandard.com

1.4. Emergency Telephone Number

Emergency Number : 24 hours: (800) 323-3053

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Skin Irrit. 2 H315
Eye Irrit. 2A H319
Skin Sens. 1 H317
Carc. 2 H351
Aquatic Chronic 3 H412
Full text of H-phrases: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)





Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation.

H351 - Suspected of causing cancer. H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-US) : P201 - Obtain special instructions before use.

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

P261 - Avoid breathing vapors, gas, mist, or spray.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling. P272 - Contaminated work clothing must not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye protection.

P302+P352 - If on skin: Wash with plenty of water.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 - If exposed or concerned: Get medical advice/attention.

P321 - Specific treatment (see section 4 on this SDS).

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national,

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and international regulations.

2.3. Other Hazards

Exposure may aggravate individuals with pre-existing skin, kidney, liver, and pulmonary disorders. Asphalt may contain trace quantities of benzene (< 0.1%). Elevated temperature conditions may emit hydrogen sulfide, an asphalt decomposition product. If stored under heat for extended periods or significantly agitated, this material might evolve or release hydrogen sulfide, a flammable gas, which can raise and widen this material's actual flammability limits and significantly lower its auto-ignition temperature. Hydrogen sulfide is a toxic gas that can be fatal. It also has a rotten egg smell that causes odor fatigue very quickly and shouldn't be used as an indicator for the presence of gas. Risk of thermal burns on contact with molten product.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Asphalt	(CAS No) 8052-42-4	63 - 68	Carc. 2, H351
Water	(CAS No) 7732-18-5	32 - 37	Not classified
Kerosine, petroleum	(CAS No) 8008-20-6	1-3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Fatty Derivative #1	(CAS No) Proprietary	0.2 - 0.5	Skin Corr. 1B, H314 Eye Dam. 1, H318
Fatty Derivative #2	(CAS No) Proprietary	0.2 - 0.5	Skin Sens. 1, H317 Aquatic Chronic 3, H412
Sodium hydroxide	(CAS No) 1310-73-2	0.2 - 0.5	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Potassium hydroxide	(CAS No) 1310-58-3	0.2 - 0.5	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318

^{*}The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Causes serious eye irritation. Causes skin irritation. Skin sensitization. Suspected of causing cancer. Risk of thermal burns on contact with molten product.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. Toxic fumes may be generated from heating asphalt and may be harmful if inhaled.

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Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction. Removal of solidified molten material from skin requires medical assistance.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Suspected of causing cancer.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Use of water on product above 100 °C (212 °F) can cause product to expand with explosive force.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist, gas or spray.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable. If stored under heat for extended periods or significantly agitated, this material might evolve or release hydrogen sulfide, a flammable gas, which can raise and widen this material's actual flammability limits and significantly lower its auto-ignition temperature. Hydrogen sulfide is a toxic gas that can be fatal. It also has a rotten egg smell that causes odor fatigue very quickly and shouldn't be used as an indicator for the presence of gas.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe gas/mist/vapors/spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

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Incompatible Products: Strong acids, strong bases, strong oxidizers. Do not use water when molten material is involved, may react violently or explosively on contact with water.

7.3. Specific End Use(s)

Asphalt.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control Parameters**

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Asphalt (8052-42-4) USA ACGIH ACGIH rWA (mg/m³) 0.5 mg/m³ (fume, inhalable fraction) USA ACGIH ACGIH chemical category Not Classifiable as a Human Carcinogen fume, coal tar-free USA NIOSH NIOSH REL (ceiling) (mg/m³) 5 mg/m³ (fume) Sodium hydroxide (1310-73-2) USA ACGIH ACGIH Ceiling (mg/m³) 2 mg/m³ USA NIOSH NIOSH REL (ceiling) (mg/m³) 2 mg/m³ USA NIOSH NIOSH REL (ceiling) (mg/m³) 10 mg/m³ USA OSHA OSHA PEL (TWA) (mg/m³) 2 mg/m³ Potassium hydroxide (1310-58-3) USA ACGIH ACGIH Ceiling (mg/m³) 2 mg/m³ VSA OSHA ACGIH Ceiling (mg/m³) 2 mg/m³ VSA NIOSH NIOSH REL (ceiling) (mg/m³) 2 mg/m³ WSA OSHA ACGIH Ceiling (mg/m³) 2 mg/m³ WSA ACGIH ACGIH TWA (mg/m³) 200 mg/m³ (application restricted to conditions in which there are negligible aerosol exposures-total hydrocarbon vapor) USA ACGIH ACGIH chemical category Skin - potential significant contribution to overall exposure by the cutaneous route, Confirmed Animal Carcinogen with Unknown Relevance to Humans USA NIOSH NIOSH REL (TWA) (mg/m³) 100 mg/m³ Hydrogen sulfide (7783-06-4) USA ACGIH ACGIH TWA (ppm) 1 ppm USA ACGIH ACGIH TWA (ppm) 5 ppm USA NIOSH NIOSH REL (ceiling) (mg/m³) 15 mg/m³ USA NIOSH NIOSH REL (ceiling) (mg/m³) 100 ppm USA OSHA NIOSH REL (ceiling) (ppm) 100 ppm USA OSHA USI DIL (ppm) 100 ppm	supplier, importer, or the appropriate davisory agency modaling. Account (127), 110011 (122), or obtain (122),			
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	USA OSHA	OSHA PEL (Ceiling) (ppm)	20 ppm	

8.2. **Exposure Controls**

Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when toxic gases may be released. Gas detectors should be used when flammable gases or vapors may be released.

Personal Protective Equipment

: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.







Materials for Protective Clothing

Hand Protection Eve Protection

Skin and Body Protection Respiratory Protection

: Chemically resistant materials and fabrics.

: Wear protective gloves.

: Chemical safety goggles.

: Wear suitable protective clothing.

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Thermal Hazard Protection : If material is hot, wear thermally resistant protective gloves.

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Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls : Do not eat, drink or smoke during use.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance : Black / Brown Odor : Asphalt

Odor Threshold : No data available

pH : 9-12

Evaporation Rate : No data available **Melting Point** : No data available : No data available **Freezing Point Boiling Point** : 212 °F (100 °C) Flash Point : No data available : No data available **Auto-ignition Temperature Decomposition Temperature** : No data available Flammability (solid, gas) : No data available **Vapor Pressure** : No data available Relative Vapor Density at 20 °C : No data available **Relative Density** : No data available

Specific Gravity : 0.9 - 1.1

Specific gravity / density: 7.5 - 9.2 (lbs/gal)Solubility: No data availablePartition Coefficient: N-Octanol/Water: No data availableViscosity: 100-400 SFS

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- **10.2.** Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.
- **10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- **10.6. Hazardous Decomposition Products:** Carbon oxides (CO, CO₂). May release flammable gases. Hydrogen sulfide. Nitrogen oxides. Sulfur oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Asphalt (8052-42-4)		
LD50 Oral Rat	> 5000 mg/kg	
LD50 Dermal Rabbit	> 2000 mg/kg	
LC50 Inhalation Rat	> 94.4 mg/m³	
Sodium hydroxide (1310-73-2)		
LD50 Dermal Rabbit	1350 mg/kg	
Potassium hydroxide (1310-58-3)		
Potassium hydroxide (1310-58-3) LD50 Oral Rat	333 mg/kg	
, , ,	333 mg/kg	
LD50 Oral Rat	333 mg/kg > 5000 mg/kg	
LD50 Oral Rat Kerosine, petroleum (8008-20-6)		

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Skin Corrosion/Irritation: Causes skin irritation.

pH: 9 - 12

Serious Eye Damage/Irritation: Causes serious eye irritation.

pH: 9 - 12

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified **Carcinogenicity:** Suspected of causing cancer.

Asphalt (8052-42-4)	
IARC group	2B
National Toxicology Program (NTP) Status	Twelfth Report - Items under consideration.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. Toxic fumes may be generated from heating asphalt and may be harmful if inhaled.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction. Removal of solidified molten material from skin requires medical assistance.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Suspected of causing cancer.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Harmful to aquatic life with long lasting effects.

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Sodium hydroxide (1310-73-2)	
LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	40 mg/l
Kerosine, petroleum (8008-20-6)	
LC50 Fish 1	2 - 5 mg/kg (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
NOEC chronic fish	0.098 mg/l (PETROTOX, Klimmish score: 2)

12.2. Persistence and Degradability

MWS-150	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

MWS-150	
Bioaccumulative Potential	Not established.
Asphalt (8052-42-4)	
BCF fish 1	(no bioaccumulation expected)
Log Pow	> 6
Potassium hydroxide (1310-58-3)	
Log Pow	0.65

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology – Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

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SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT

Proper Shipping Name : ELEVATED TEMPERATURE LIQUID, N.O.S., (ASPHALT)

Hazard Class : 9

Identification Number : UN3257

Label Codes : 9
Packing Group : III
ERG Number : 130
14.2. In Accordance with IMDG

Proper Shipping Name : ELEVATED TEMPERATURE LIQUID, N.O.S., (ASPHALT)

Hazard Class : 9

Identification Number: UN3257Packing Group: III

Label Codes : 9 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-P



14.3. In Accordance with IATA

Proper Shipping Name : ELEVATED TEMPERATURE LIQUID, N.O.S., (ASPHALT)

Identification Number: UN3257Hazard Class: 9

Label Codes : 9
ERG Code (IATA) : 9L

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

MWS-150		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
	Delayed (chronic) health hazard	
Asphalt (8052-42-4)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard		
Sodium hydroxide (1310-73-2)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
Potassium hydroxide (1310-58-3)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Kerosine, petroleum (8008-20-6)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Water (7732-18-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		

15.2 US State Regulations

Asphalt (8052-42-4)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Sodium hydroxide (1310-73-2)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

Potassium hydroxide (1310-58-3)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List

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U.S. - Pennsylvania - RTK (Right to Know) List

Kerosine, petroleum (8008-20-6)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 09/01/2015

Other Information: This document has been prepared in accordance with the SDSrequirements of the OSHA Hazard Communication Standard 29 CFR

1910.1200.

GHS Full Text Phrases:

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Acute Tox. 2 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 2
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 3	Flammable liquids Category 3
Liquefied gas	Gases under pressure Liquefied gas
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H220	Extremely flammable gas
H226	Flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H290	May be corrosive to metals
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

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