

# **AEP; E1-Prime; CMS-PX**

**Safety Data Sheet** 

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04/05/2021 Date of issue: 09/01/2015 Version: 2.0

# **SECTION 1: IDENTIFICATION**

### 1.1. Product Identifier

Product Form: Mixture

Product Name: AEP; E1-Prime; CMS-PX

Synonyms: Emulsion

### 1.2. Intended Use of the Product

Use of the substance/mixture: Prime.

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

Company:

Russell Standard 285 Kappa Drive

Suite 300

Pittsburgh, PA 15238

Directory: (800) 323-3053
Main: (412) 449-0700
Fax: (412) 449-0704
www.russellstandard.com

### 1.4. Emergency Telephone Number

Emergency Number: (800) 255-3924 (24 hours)

### **SECTION 2: HAZARDS IDENTIFICATION**

### 2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Flam. Liq. 4 H227 Skin Irrit. 2 H315 Eye Irrit. 2A H319 Skin Sens. 1 H317 Carc. 2 H351 Repr. 1B H360 H402 Aquatic Acute 3 Aquatic Chronic 3 H412

Full text of H-phrases: see section 16

# 2.2. Label Elements

### **GHS-US Labeling**

Hazard Pictograms (GHS-US):





GHS07

GHS0

Signal Word (GHS-US): Danger

## 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.

H360 - May damage fertility or the unborn child.

H402 - Harmful to aquatic life.

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, 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 autoignition 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. Exposure may aggravate those with preexisting eye, skin, or respiratory conditions.

# 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)
Water	(CAS No) 7732-18-5	55 - 75	Not classified
Asphalt	(CAS No) 8052-42-4	25 - 45	Carc. 2, H351
# 2 Fuel	(CAS No) Proprietary	7 - 15	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Carc. 2, H351 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Fatty Derivative #1	(CAS No) Proprietary	0.25 - 0.75	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360 STOT SE 3, H336
Fatty Derivative #2	(CAS No) Proprietary	0.2 - 0.6	Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317
Fatty Derivative #3	(CAS No) Proprietary	0.2 - 0.6	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Hydrochloric acid	(CAS No) 7647-01-0	0.1 - 0.3	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401

<sup>\*</sup>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. May damage fertility. May damage the unborn child. 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.

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. May damage fertility or the unborn child.

# 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: Combustible liquid.

Explosion Hazard: May form flammable or explosive vapor-air mixture.

**Reactivity:** Reacts violently with strong oxidizers. Increased risk of fire or explosion.

# 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

**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. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges. 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. Stop leak if safe to do so.

### **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. Eliminate ignition sources.

#### 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. As an immediate precautionary measure, isolate spill or leak area in all directions.

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. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

# 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. Take precautionary measures against static discharge. Use only non-sparking tools. 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. Avoid contact with skin, eyes and clothing.

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. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

**Storage Conditions:** Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

**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)

Prime.

# 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 TWA (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)

Hydrochloric acid (7647-01-0)		
USA ACGIH	ACGIH Ceiling (ppm)	2 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	7 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	5 ppm
USA IDLH	US IDLH (ppm)	50 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	7 mg/m³
USA OSHA	OSHA PEL (Ceiling) (ppm)	5 ppm

Hydrogen sulfide (7783-06-4)		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	5 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	15 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	10 ppm
USA IDLH	US IDLH (ppm)	100 ppm
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. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

**Personal Protective Equipment:** Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.









Materials for Protective Clothing: Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Hand Protection: Wear protective gloves. Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

**Respiratory Protection:** 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.

**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**: 2-5

Evaporation Rate: No data available
Melting Point: No data available
Freezing Point: No data available
Boiling Point: 212 °F (100 °C)
Flash Point: No data available

Auto-ignition Temperature: No data available 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 available

Partition Coefficient: N-Octanol/Water: No data available

Viscosity: 10 - 100 SFS

### 9.2. Other Information

No additional information available

### **SECTION 10: STABILITY AND REACTIVITY**

### 10.1. Reactivity

Reacts violently with strong oxidizers. Increased risk of fire or explosion.

### 10.2. Chemical Stability

Combustible liquid. May form flammable or explosive vapor-air mixture.

# 10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

# 10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

### 10.6. Hazardous Decomposition Products:

Carbon oxides (CO, CO<sub>2</sub>). 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	

Fatty Derivative #1	
ATE (Oral)	100.00 mg/kg body weight
ATE (Dermal)	300.00 mg/kg body weight
ATE (Gases)	700.00 ppmV/4h
ATE (Vapors)	3.00 mg/I/4h
ATE (Dust/Mist)	0.50 mg/I/4h

Fatty Derivative #3	
ATE (Oral)	500.00 mg/kg body weight
Hydrochloric acid (7647-01-0)	
LD50 Dermal Rabbit	> 5010 mg/kg

Skin Corrosion/Irritation: Causes skin irritation.

**pH**: 2 - 5

Serious Eye Damage/Irritation: Causes serious eye irritation.

**pH**: 2 - 5

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.

Hydrochloric acid (7647-01-0)	
IARC group	3

Reproductive Toxicity: May damage fertility or the unborn child.

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. May damage fertility or the unborn child.

# **SECTION 12: ECOLOGICAL INFORMATION**

# 12.1. Toxicity

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

Hydrochloric acid (7647-01-0)	
LC50 Fish 1	3.25 - 3.5 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
EC50 Daphnia 1	4.92 mg/l (Exposure time: 48 h - Species: Daphnia magna)

# 12.2. Persistence and Degradability

AEP; E1-Prime; CMS-PX	
Persistence and Degradability	May cause long-term adverse effects in the environment.

# 12.3. Bioaccumulative Potential

AEP; E1-Prime; CMS-PX	
Bioaccumulative Potential	Not established.

Asphalt (8052-42-4)	
BCF fish 1	(no bioaccumulation expected)
Log Pow	> 6

### 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: Handle empty containers with care because residual vapors are flammable.

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

### SECTION 14: TRANSPORT INFORMATION

### 14.1. In Accordance with DOT

Proper Shipping Name: ASPHALT at or above its flash point

Hazard Class: 3

**Identification Number:** NA1999

Label Codes: 3
Packing Group: III
ERG Number: 130



# 14.2. In Accordance with IMDG

Not regulated for transport

### 14.3. In Accordance with IATA

Not regulated for transport

# **SECTION 15: REGULATORY INFORMATION**

# 15.1 US Federal Regulations

AEP; E1-Prime; CMS-PX	
SARA Section 311/312 Hazard Classes	Fire hazard
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	

Hydrochloric acid (7647-01-0)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Listed on United States SARA Section 313		
SARA Section 302 Threshold Planning Quantity (TPQ)	500 (gas only)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
SARA Section 313 - Emission Reporting	1.0 % (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)	

Water (7732-18-5)

Asphalt (8052-42-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# 15.2 US State Regulations

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		
Hydrochloric acid (7647-01-0)		
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

# 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 SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

the conditional	unication standard 29 CFK 1910.1200.	
GHS Full Text Phrases		
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3	
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3	
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1	
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2	
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3	
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1	
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. Liq. 2	Flammable liquids Category 2	
Flam. Liq. 3	Flammable liquids Category 3	
Flam. Liq. 4	Flammable liquids Category 4	
Met. Corr. 1	Corrosive to metals Category 1	
Repr. 1B	Reproductive toxicity Category 1B	
Skin Corr. 1B	Skin corrosion/irritation Category 1B	
Skin Irrit. 2	Skin corrosion/irritation Category 2	
Skin Sens. 1	Skin sensitization Category 1	
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1	
STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
H225	Highly flammable liquid and vapor	
H226	Flammable liquid and vapor	
H227	Combustible liquid	
H290	May be corrosive to metals	
H301	Toxic if swallowed	
H302	Harmful if swallowed	
H304	May be fatal if swallowed and enters airways	
H311	Toxic in contact with skin	
H314	Causes severe skin burns and eye damage	
H315	Causes skin irritation	
H317	May cause an allergic skin reaction	

GHS Full Text Phrases	
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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)