



Brew-Clean

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 03/17/2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Brew-Clean
Product code : 4410
BIG no : 10037

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Low Foam Non-Caustic Cleaner; Alkaline Recirculation Cleaner;

1.3. Details of the supplier of the safety data sheet

Ace Chemical Products, Inc.
8415 N. 87th Street
Milwaukee, WI 53224 - USA
T (414) 357-8515 - F (414) 357-8528
info@acechem.com - www.acechem.com

1.4. Emergency telephone number

Emergency number : For help in chemical emergencies, call Chemtrec day or night
Chemtrec 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Met. Corr. 1 H290
Acute Tox. 4 (Dermal) H312
Skin Corr. 1A H314

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US) : P260 - Do not breathe dust, mist, spray
P264 - Wash all exposed body parts thoroughly after handling
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - 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 doctor, a POISON CENTER
P321 - Specific treatment - see First Aid measures on this label
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P406 - Store in corrosion-resistant container with a resistant inner liner
P501 - Dispose of contents/container to proper treatment facilities in accordance with all applicable local, state & federal regulations

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

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2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
disodium metasilicate	(CAS No) 6834-92-0	20 - 30	Skin Corr. 1B, H314
sodium carbonate	(CAS No) 497-19-8	20 - 30	Skin Corr. 1A, H314
sodium percarbonate	(CAS No) 3313-92-6	10 - 20	Not classified

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
- First-aid measures after skin contact : Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.
- First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Cover eyes aseptically. Take victim to an ophthalmologist. Do not apply neutralizing agents. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not give activated charcoal. Do not give chemical antidote. Immediately call a POISON CENTER or doctor/physician. Take the container/vomit to the doctor/hospital. Ingestion of large quantities: immediately to hospital.

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

- Symptoms/injuries after inhalation : AFTER INHALATION OF DUST: Dry/sore throat. Coughing. Irritation of the respiratory tract. Possible inflammation of the respiratory tract. Irritation of the nasal mucous membranes. ON CONTINUOUS EXPOSURE/CONTACT: Respiratory difficulties. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible oedema of the upper respiratory tract. Possible laryngeal spasm/oedema. Risk of lung oedema.
- Symptoms/injuries after skin contact : Blisters. Caustic burns/corrosion of the skin. Slow-healing wounds.
- Symptoms/injuries after eye contact : Corrosion of the eye tissue. Permanent eye damage.
- Symptoms/injuries after ingestion : Dry/sore throat. Nausea. Abdominal pain. Blood in vomit. Difficulty in swallowing. Possible esophageal perforation. Burns to the gastric/intestinal mucosa. Bleeding of the gastrointestinal tract. Shock.
- Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Skin rash/inflammation. Possible inflammation of the respiratory tract. Gastrointestinal complaints.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : EXTINGUISHING MEDIA FOR SURROUNDING FIRES: All extinguishing media allowed. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : No unsuitable extinguishing media known. Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : DIRECT FIRE HAZARD. Non combustible. INDIRECT FIRE HAZARD. Reactions involving a fire hazard: see "Reactivity Hazard".
- Explosion hazard : INDIRECT EXPLOSION HAZARD. Reactions with explosion hazards: see "Reactivity Hazard".

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Reactivity : Reacts exothermically with water (moisture): release of toxic and corrosive gases/vapours. Reacts on exposure to water (moisture) with (some) metals: release of highly flammable gases/vapours (hydrogen). Absorbs the atmospheric CO₂. Violent to explosive reaction with (some) acids. Reacts violently with many compounds: heat release resulting in increased fire or explosion risk.

5.3. Advice for firefighters

Firefighting instructions : Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Face-shield. Corrosion-proof suit. Dust cloud production: compressed air/oxygen apparatus. Contact with moisture/water: compressed air/oxygen apparatus. Contact with moisture/water: gas-tight suit. See "Material-Handling" to select protective clothing.

Emergency procedures : Mark the danger area. Prevent dust cloud formation. Corrosion-proof appliances. Keep containers closed. Avoid ingress of water in the containers. Wash contaminated clothes. On contact with moisture/water: keep upwind. On contact with moisture/water: consider evacuation. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

For containment : Plug the leak, cut off the supply. Dam up the solid spill. Collect spillage. Consult "Material-handling" to select material of containers.

Methods for cleaning up : Collect the spill only if it is in a dry state. Wetted substance: cover with powdered limestone or dry sand, earth, vermiculite. Scoop solid spill into closing containers. See "Material-handling" for suitable container materials. Under controlled conditions: neutralize leftovers with dilute acid solution. Possible violent reaction if you neutralize. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : May be corrosive to metals.

Precautions for safe handling : Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Use corrosionproof equipment. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid raising dust. Avoid contact of substance with water. Observe very strict hygiene - avoid contact. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

Hygiene measures : Wash all exposed body parts thoroughly after handling Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : direct sunlight, heat sources, Keep container closed when not in use. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

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Maximum storage period	: 1 year
Storage temperature	: ambient
Heat and ignition sources	: KEEP SUBSTANCE AWAY FROM: heat sources.
Prohibitions on mixed storage	: KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents. (strong) acids. metals. organic materials. water/moisture.
Storage area	: Store in a cool area. Keep out of direct sunlight. Store in a dry area. Store in a dark area. Keep locked up. Provide for a tub to collect spills. Keep only in the original container. Meets the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: hermetical. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	: SUITABLE MATERIAL: stainless steel. nickel. polyethylene. polypropylene. glass. stoneware/porcelain. MATERIAL TO AVOID: lead. aluminium. copper. tin. zinc. bronze.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Brew-Clean		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
OSHA	Not applicable	

disodium metasilicate (6834-92-0)	
ACGIH	Not applicable
OSHA	Not applicable

sodium carbonate (497-19-8)	
ACGIH	Not applicable
OSHA	Not applicable

sodium percarbonate (3313-92-6)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Materials for protective clothing	: GIVE EXCELLENT RESISTANCE: nitrile rubber. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: chlorinated polyethylene. styrene-butadiene rubber. nitrile rubber/PVC. GIVE POOR RESISTANCE: PVA. natural fibres.
Hand protection	: Gloves. Wear eye protection, face protection, protective clothing, protective gloves protective gloves.
Eye protection	: Face shield. In case of dust production: protective goggles.
Skin and body protection	: Corrosion-proof clothing. In case of dust production: head/neck protection.
Respiratory protection	: Dust production: dust mask with filter type P3. Self-contained breathing apparatus if conc. in air > 2 mg/m ³ .

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline powder.
Colour	: White or off-white
Odour	: odourless
Odour threshold	: No data available
pH	: 10 - 12 5%
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 318 °C

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Freezing point	: No data available
Boiling point	: 1390 °C
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: < 0.1 hPa
Relative vapour density at 20 °C	: No data available
Relative density	: 2.1
Density	: 2130 kg/m ³
Solubility	: Exothermically soluble in water. Water: 42 g/100ml Ethanol: soluble
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 0.53 mm ² /s (25 °C; 1 mol/l)
Viscosity, dynamic	: 1.12 mPa.s (25 °C)
Explosive properties	: None.
Oxidising properties	: No data available.
Explosive limits	: No data available

9.2. Other information

Minimum ignition energy	: Not applicable
Saturation concentration	: 671 g/m ³
VOC content	: 0 %
Other properties	: Translucent. Hygroscopic. Substance has basic reaction.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts exothermically with water (moisture): release of toxic and corrosive gases/vapours. Reacts on exposure to water (moisture) with (some) metals: release of highly flammable gases/vapours (hydrogen). Absorbs the atmospheric CO₂. Violent to explosive reaction with (some) acids. Reacts violently with many compounds: heat release resulting in increased fire or explosion risk.

10.2. Chemical stability

Hygroscopic. Unstable on exposure to air.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Moisture. Water, humidity.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Dermal: Harmful in contact with skin.

Brew-Clean	
LD50 dermal rabbit	1350 mg/kg (Rabbit; Literature)
ATE US (dermal)	1350.000 mg/kg bodyweight

disodium metasilicate (6834-92-0)	
LD50 dermal rat	> 5000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)

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sodium carbonate (497-19-8)	
LD50 oral rat	2800 mg/kg (Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Experimental value)
ATE US (oral)	2800.000 mg/kg bodyweight

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 10 - 12 5%
Serious eye damage/irritation	: Not classified pH: 10 - 12 5%
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
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	: AFTER INHALATION OF DUST: Dry/sore throat. Coughing. Irritation of the respiratory tract. Possible inflammation of the respiratory tract. Irritation of the nasal mucous membranes. ON CONTINUOUS EXPOSURE/CONTACT: Respiratory difficulties. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible oedema of the upper respiratory tract. Possible laryngeal spasm/oedema. Risk of lung oedema.
Symptoms/injuries after skin contact	: Blisters. Caustic burns/corrosion of the skin. Slow-healing wounds.
Symptoms/injuries after eye contact	: Corrosion of the eye tissue. Permanent eye damage.
Symptoms/injuries after ingestion	: Dry/sore throat. Nausea. Abdominal pain. Blood in vomit. Difficulty in swallowing. Possible esophageal perforation. Burns to the gastric/intestinal mucosa. Bleeding of the gastrointestinal tract. Shock.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Skin rash/inflammation. Possible inflammation of the respiratory tract. Gastrointestinal complaints.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Classification concerning the environment: not applicable.
Ecology - water	: Ground water pollutant. Maximum concentration in drinking water: 200 mg/l (sodium) (Directive 98/83/EC). Harmful to fishes. Harmful to invertebrates (Daphnia). pH shift.

Brew-Clean	
LC50 fish 1	45.4 mg/l (96 h; <i>Salmo gairdneri</i> (<i>Oncorhynchus mykiss</i>); Solution >=50%)
EC50 Daphnia 1	40.4 mg/l (48 h; <i>Ceriodaphnia</i> sp.; Nominal concentration)
LC50 fish 2	189 mg/l (48 h; <i>Leuciscus idus</i>)
TLM fish 1	99 mg/l (48 h; <i>Lepomis macrochirus</i>)
TLM fish 2	125 ppm (96 h; <i>Gambusia affinis</i>)

disodium metasilicate (6834-92-0)	
LC50 fish 1	210 mg/l (96 h; <i>Brachydanio rerio</i>)
EC50 Daphnia 1	216 mg/l (96 h; <i>Daphnia magna</i> ; GLP)
LC50 fish 2	2320 mg/l (96 h; <i>Gambusia affinis</i>)
EC50 Daphnia 2	632 mg/l (96 h; <i>Lymnaea</i> sp.)
Threshold limit algae 1	207 mg/l (72 h; <i>Scenedesmus subspicatus</i> ; GLP)

sodium carbonate (497-19-8)	
LC50 fish 1	300 mg/l (96 h; <i>Lepomis macrochirus</i>)
EC50 Daphnia 1	< 424 mg/l (48 h; <i>Daphnia magna</i>)
EC50 other aquatic organisms 1	14 mg/l (168 h; Plankton)
LC50 fish 2	740 mg/l (96 h; <i>Gambusia affinis</i>)

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sodium carbonate (497-19-8)	
EC50 Daphnia 2	265 mg/l (48 h; Daphnia magna)
TLM fish 1	300 ppm (96 h; Lepomis macrochirus)
TLM other aquatic organisms 1	500 ppm (96 h; Daphnia magna)
Threshold limit algae 1	242 mg/l (5 days; Algae)

12.2. Persistence and degradability

Brew-Clean	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

disodium metasilicate (6834-92-0)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

sodium carbonate (497-19-8)	
Persistence and degradability	Biodegradability: not applicable. Low potential for adsorption in soil.
ThOD	Not applicable (inorganic)

sodium percarbonate (3313-92-6)	
Persistence and degradability	Biodegradability in soil: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Brew-Clean	
Bioaccumulative potential	Bioaccumulation: not applicable.

disodium metasilicate (6834-92-0)	
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.

sodium carbonate (497-19-8)	
Log Pow	-6.19 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

sodium percarbonate (3313-92-6)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer :
Effect on the global warming : No known ecological damage caused by this product.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Remove for physico-chemical/biological treatment. Do not discharge into surface water.
- Additional information : Clean up even minor leaks or spills if possible without unnecessary risk.
- Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

- In accordance with DOT
- Transport document description : UN3253 Disodium trioxosilicate, 8, III
- UN-No.(DOT) : UN3253
- Proper Shipping Name (DOT) : Disodium trioxosilicate
- Hazard Classes (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136
- Hazard labels (DOT) : 8 - Corrosive



- Packing group (DOT) : III - Minor Danger
- DOT Special Provisions (49 CFR 172.102) : IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).
IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.
T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2)
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.
- DOT Packaging Exceptions (49 CFR 173.xxx) : 154
- DOT Packaging Non Bulk (49 CFR 173.xxx) : 213
- DOT Packaging Bulk (49 CFR 173.xxx) : 240
- DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 25 kg
- DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 100 kg
- DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
- DOT Vessel Stowage Other : 52 - Stow "separated from" acids

Additional information

- Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

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Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

C; R35

Full text of R-phrases: see section 16

15.2.2. National regulations

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15.3. US State regulations

SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H290	May be corrosive to metals
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage

NFPA health hazard

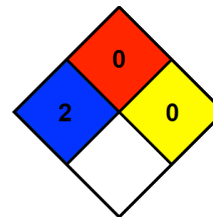
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

: 0 - Materials that will not burn.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

Personal Protection : D

SDS US (GHS HazCom 2012)

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