JOHNSEN'S DE-ICER 10 OZ.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 08/06/2014 : Version:

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

1.1. Product identifier

Product form : Mixture

Trade name : JOHNSEN'S DE-ICER 10 OZ.

Product code : 3282

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

Use of the substance/mixture : De-Icer

1.3. Details of the supplier of the safety data sheet

Technical Chemical Company
P.O. BOX 139
Cleburne, Texas 76033
T 817-645-6088

1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300, 1-703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Aerosol 2	H223
Compressed gas	H280
Acute Tox. 3 (Oral)	H301
Acute Tox. 3 (Dermal)	H311
STOT SE 1	H370

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS02 GHS04 GHS06 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :
H223 - Flammable aerosol
H280 - Contains gas under pressure; may explode if heated
H301+H311 - Toxic if swallowed or in contact with skin
H370 - Causes damage to organs

Precautionary statements (GHS-US) :
P210 - Keep away from heat,sparks,open flames,hot surfaces. - No smoking
P211 - Do not spray on an open flame or other ignition source
P251 - Pressurized container: Do not pierce or burn, even after use
P260 - Do not breathe dust,fumes,gas,mist,vapor spray
P264 - Wash affected areas thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves,protective clothing,eye protection,face protection
P301+P310 - If swallowed: Immediately call a poison control center, doctor,physician,
P302+P352 - If on skin: Wash with plenty of soap and water
P307+P311 - If exposed: Call a poison center/doctor
P312 - Call a POISON CONTROL CENTER, doctor, if you feel unwell.
P321 - Specific treatment: See section 4.1 on SDS
P330 - Rinse mouth
P361 - Take off immediately all contaminated clothing
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P410+P403 - Protect from sunlight. Store in a well-ventilated place
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

2.3. Other hazards

Other hazards not contributing to the classification : Contains gas under pressure; may explode if heated.

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)
Methanol	(CAS No) 67-56-1	50 - 70	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 STOT SE 1, H370
Petroleum Gases, Liquefied, Sweetened	(CAS No) 68476-86-8	10 - 30	Flam. Gas 1, H220 Flam. Liq. 1, H224
Water	(CAS No) 7732-18-5	10 - 30	Not classified
Ethylene Glycol	(CAS No) 107-21-1	1 - 5	Acute Tox. 1 (Oral), H300 Acute Tox. 4 (Inhalation:vapour), H332
2-Aminoethanol	(CAS No) 141-43-5	<= 0.0714	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314
Sodium-2(3H)-Benzothiazolethione, Conc=50%, Aqueous Solution	(CAS No) 2492-26-4	0.040866 - 0.042534	Skin Corr. 1A, H314
Proprietary Inhibitor Package	(CAS No) Proprietary	<= 0.0252	Not classified

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). Call a POISON CENTER or doctor/physician.

First-aid measures after inhalation : Cough. Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Immediately call a poison center or doctor/physician. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Specific measures (see ... on this label). Wash contaminated clothing before reuse.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persist. Direct contact with the eyes is likely to be irritating.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Immediately call a poison center or doctor/physician.

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

Symptoms/injuries : Causes damage to organs.

Symptoms/injuries after inhalation : Shortness of breath.

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin.

Symptoms/injuries after eye contact : May cause slight eye irritation . Inflammation/damage of the eye tissue. Irritation of the eye tissue. Redness of the eye tissue.

Symptoms/injuries after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable aerosol.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. DO NOT fight fire when fire reaches explosives. Evacuate area.

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

Other information : Aerosol Level 2.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No open flames. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust,fume,gas,mist,vapor spray.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Dam up the liquid spill. Contain released substance, pump into suitable containers. Plug the leak, cut off the supply.

Methods for cleaning up : Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not spray on an open flame or other ignition source. Do not breathe dust,fumes,gas,mist,vapor spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

Storage area : Store in a well-ventilated place.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethylene Glycol (107-21-1)		
USA ACGIH	ACGIH Ceiling (mg/m³)	100 mg/m³

2-Aminoethanol (141-43-5)		
USA ACGIH	ACGIH TWA (ppm)	3 ppm
USA ACGIH	ACGIH STEL (ppm)	3 ppm

Petroleum Gases, Liquefied, Sweetened (68476-86-8)		
USA ACGIH	ACGIH TWA (ppm)	1000 ppm Listed under Aliphatic hydrocarbon gases alkane C1-C4
USA OSHA	OSHA PEL (TWA) (mg/m³)	1800 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

Methanol (67-56-1)		
USA ACGIH	ACGIH TWA (mg/m³)	262 mg/m³
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (mg/m³)	328 mg/m³
USA ACGIH	ACGIH STEL (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm

8.2. Exposure controls

Appropriate engineering controls : Local exhaust venilation, vent hoods.

Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Gas

Appearance : Liquid.

Color : Colourless to light yellow.

Odor : Characteristic.

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : -98 °C (Lowest Component)

Freezing point : No data available

Boiling point : 65 °C (Lowest Component)

Flash point : -96.23 °C (Lowest Component)

Auto-ignition temperature : 455 °C (Lowest Component)

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : No data available

Critical pressure : 79547 hPa (Lowest Component)

Relative vapor density at 20 °C : No data available

Relative density : 0.834

Specific gravity / density : 0.83 kg/m³

Solubility : Soluble in alcohols. Soluble in water.

Log Pow : No data available

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Explosive limits : 5.5 - 36.5 vol % (Lowest Component)

9.2. Other information

VOC content : 84.9 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Toxic if swallowed. Toxic in contact with skin.

Ethylene Glycol (107-21-1)	
LD50 oral rat	7712 mg/kg body weight
LD50 dermal rat	> 3500 mg/kg body weight
LC50 inhalation rat (mg/l)	> 2.5 mg/l 6 Hour by Air

Sodium-2(3H)-Benzothiazolethione, Conc=50%, Aqueous Solution (2492-26-4)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)

2-Aminoethanol (141-43-5)	
LD50 oral rat	1720 mg/kg (Rat)
LD50 dermal rabbit	1018 mg/kg (Rabbit)

Methanol (67-56-1)	
LD50 oral rat	>= 2528 mg/kg body weight application as 50% aqueous solution
LD50 dermal rabbit	17100 mg/kg corresponding to 20 ml/kg bw according to the authors
LC50 inhalation rat (mg/l)	128.2 mg/l/4h Air

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Causes damage to organs.

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met. Toxic if swallowed. Toxic in contact with skin.

Symptoms/injuries after inhalation : Shortness of breath.

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin.

Symptoms/injuries after eye contact : May cause slight eye irritation . Inflammation/damage of the eye tissue. Irritation of the eye tissue. Redness of the eye tissue.

Symptoms/injuries after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

Ethylene Glycol (107-21-1)	
LC50 fish 1	53000 mg/l (96 h; Pimephales promelas; Static system)
EC50 Daphnia 1	> 10000 mg/l (24 h; Daphnia magna)
LC50 fish 2	40761 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Static system)

Ethylene Glycol (107-21-1)	
Threshold limit algae 1	> 10000 mg/l (168 h; Scenedesmus quadricauda)
Threshold limit algae 2	2000 mg/l (192 h; Microcystis aeruginosa)

Sodium-2(3H)-Benzothiazolethione, Conc=50%, Aqueous Solution (2492-26-4)	
LC50 fish 1	3.8 mg/l (96 h; Lepomis macrochirus; Pure substance)
EC50 Daphnia 1	19 mg/l (48 h; Daphnia magna; Pure substance)
LC50 fish 2	1.8 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Pure substance)

2-Aminoethanol (141-43-5)	
LC50 fish 1	150 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	140 mg/l (24 h; Daphnia magna)
LC50 fish 2	329.16 mg/l (96 h; Lepomis macrochirus)
TLM fish 1	100 - 1000,96 h; Pisces
TLM other aquatic organisms 1	100 - 1000,96 h
Threshold limit algae 1	0.97 mg/l (192 h; Scenedesmus quadricauda; Inhibitory)
Threshold limit algae 2	35 mg/l (72 h; Algae)

Methanol (67-56-1)	
LC50 fish 1	15400 mg/l (96 h; Lepomis macrochirus; Lethal)
EC50 Daphnia 1	> 10000 mg/l (48 h; Daphnia magna; Lethal)
LC50 fish 2	10800 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	24500 mg/l (48 h; Daphnia magna; Locomotor effect)
Threshold limit other aquatic organisms 1	6600 mg/l (16 h; Pseudomonas putida)
Threshold limit algae 1	530 mg/l (192 h; Microcystis aeruginosa)
Threshold limit algae 2	8000 mg/l (168 h; Scenedesmus quadricauda)

12.2. Persistence and degradability

JOHNSEN'S DE-ICER 10 OZ.	
Persistence and degradability	Not established.

Ethylene Glycol (107-21-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.47 g O_2 /g substance
Chemical oxygen demand (COD)	1.24 g O_2 /g substance
ThOD	1.29 g O_2 /g substance
BOD (% of ThOD)	0.36 % ThOD

Water (7732-18-5)	
Persistence and degradability	Not established.

Sodium-2(3H)-Benzothiazolethione, Conc=50%, Aqueous Solution (2492-26-4)	
Persistence and degradability	No (test)data on mobility of the components available.

2-Aminoethanol (141-43-5)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.80 g O_2 /g substance
Chemical oxygen demand (COD)	1.34 g O_2 /g substance
ThOD	2.49 g O_2 /g substance
BOD (% of ThOD)	0.32 % ThOD

Proprietary Inhibitor Package (Proprietary)	
Persistence and degradability	Not established.

Petroleum Gases, Liquefied, Sweetened (68476-86-8)	
Persistence and degradability	Not established.

Methanol (67-56-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O_2 /g substance
Chemical oxygen demand (COD)	1.42 g O_2 /g substance
ThOD	1.5 g O_2 /g substance
BOD (% of ThOD)	0.8 % ThOD

12.3. Bioaccumulative potential

JOHNSEN'S DE-ICER 10 OZ.	
Bioaccumulative potential	Not established.

Ethylene Glycol (107-21-1)	
BCF fish 1	10 (72 h; Leuciscus idus)
BCF other aquatic organisms 1	0.21 - 0.6 (Procambarus sp.; Chronic)
BCF other aquatic organisms 2	190 (24 h; Algae)
Log Pow	-1.34 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Water (7732-18-5)	
Bioaccumulative potential	Not established.

Sodium-2(3H)-Benzothiazolethione, Conc=50%, Aqueous Solution (2492-26-4)	
Log Pow	-0.46
Bioaccumulative potential	Bioaccumulation: not applicable.

2-Aminoethanol (141-43-5)	
Log Pow	-1.91
Bioaccumulative potential	Bioaccumulation: not applicable.

Proprietary Inhibitor Package (Proprietary)	
Bioaccumulative potential	Not established.

Petroleum Gases, Liquefied, Sweetened (68476-86-8)	
Bioaccumulative potential	Not established.

Methanol (67-56-1)	
BCF fish 1	< 10 (72 h; Leuciscus idus)
BCF fish 2	1 (72 h; Cyprinus carpio; Blood)
Log Pow	-0.77 (Experimental value; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Ethylene Glycol (107-21-1)	
Surface tension	0.048 N/m (20 °C)

2-Aminoethanol (141-43-5)	
Surface tension	0.050 N/m

Methanol (67-56-1)	
Surface tension	0.023 N/m (20 °C)

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 in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Additional information : Flammable vapors may accumulate in the container.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): UN1950, Aerosols, 2.1, Limited Quantity

ICAO/IATA (air): UN1950, Aerosols, 2.1 (6.1), III

IMO/IMDG (water): UN1950, Aerosols, 2.1 (6.1), III

Special Provisions: N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Aerosols
flammable, (each not exceeding 1 L capacity)

Department of Transportation (DOT) Hazard Classes : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

Hazard labels (DOT)	:	2.1 - Flammable gas

DOT Special Provisions (49 CFR 172.102)	:	N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	306
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	None
DOT Packaging Bulk (49 CFR 173.xxx)	:	None

14.3. Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

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	:	48 - Stow ‘‘away from’’ sources of heat,87 - Stow ‘‘separated from’’ Class 1 (explosives) except Division 14,126 - Segregation same as for Class 9, miscellaneous hazardous materials
Subsidiary risks (IMDG)	:	6.1

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	150 kg
Subsidiary risks (IATA)	:	6.1

SECTION 15: Regulatory information

15.1. US Federal regulations

JOHNSEN'S DE-ICER 10 OZ.	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard Sudden release of pressure hazard

Ethylene Glycol (107-21-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	100 %

Sodium-2(3H)-Benzothiazolethione, Conc=50%, Aqueous Solution (2492-26-4)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard

2-Aminoethanol (141-43-5)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

Petroleum Gases, Liquefied, Sweetened (68476-86-8)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard Sudden release of pressure hazard

Methanol (67-56-1)	
Listed on United States SARA Section 313 Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard

15.2. International regulations

CANADA

JOHNSEN'S DE-ICER 10 OZ.	
WHMIS Classification	Class B Division 5 - Flammable Aerosol

Methanol (67-56-1)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects

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]

Carc.Cat.1; R45
Muta.Cat.2; R46
F+; R12
T; R23/24/25
T; R39/23/24/25

Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

15.3. US State regulations

No additional information available

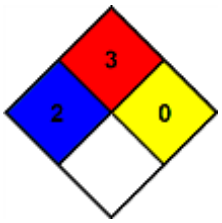
SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 1 (Oral)	Acute toxicity (oral) Category 1
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Compressed gas	Gases under pressure Compressed gas
Flam. Aerosol 2	Flammable aerosol Category 2
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 1	Flammable liquids Category 1
Flam. Liq. 2	Flammable liquids Category 2
Skin Corr. 1A	Skin corrosion/irritation Category 1A
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
H220	Extremely flammable gas
H223	Flammable aerosol
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H300	Fatal if swallowed
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H331	Toxic if inhaled
H332	Harmful if inhaled
H370	Causes damage to organs

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	:	3 - Liquids and solids that can be ignited under almost all ambient conditions.
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	:	3 Serious Hazard
Physical	:	1 Slight Hazard
Personal Protection	:	B

SDS US (GHS HazCom 2012) - TCC

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.