

SAFETY DATA SHEET

Sole-Guard

Section 1. Identification

GHS product identifier : Sole-Guard
Other means of identification : Not available.
Product type : Liquid.

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

Product use : Veterinary product. Hoof packing material
Area of application : Professional applications.

Manufacturer : **Manufactured for : Vettec, Inc.**
600 E. Hueneme Road
Oxnard, CA 93033
Telephone no.: 800-483-8832
Fax no.: 805-488-2266
www.vettec.com

e-mail address of person responsible for this SDS : Contact customer service at 1-800-KERR-123 for any questions

Emergency telephone number (with hours of operation) : CHEMTREC® (24 hours) U.S. : 1-800-424-9300 International: +1-703-527-3887

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).


Health effects are based on the uncured material.

Classification of the substance or mixture : ACUTE TOXICITY (inhalation) - Category 4
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
RESPIRATORY SENSITIZATION - Category 1
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys, liver, lungs and pancreas) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 3.2%

GHS label elements

Date of issue/Date of revision : 08/07/2015 **Date of previous issue** : No previous validation **Version** : 1 1/14

Section 2. Hazards identification

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	Harmful if inhaled. Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Suspected of causing cancer. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. (kidneys, liver, lungs, pancreas)
<u>Precautionary statements</u>		
Prevention	:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wear respiratory protection. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	:	Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	:	Store locked up.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Other means of identification	:	Not available.
<u>CAS number/other identifiers</u>		
CAS number	:	Not applicable.
Product code	:	46160

Section 3. Composition/information on ingredients

Ingredient name	Other names	%	CAS number
4,4'-methylenedi(cyclohexyl isocyanate)	Not available.	10-30	5124-30-1
diethylmethylbenzenediamine	Not available.	5-10	68479-98-1
methylenediphenyl diisocyanate	methylenediphenyl diisocyanate	5-10	26447-40-5
Benzene, 1,1'-methylenebis[isocyanato-, homopolymer	Not available.	1-5	39310-05-9
bismuth(3+) neodecanoate	Not available.	1-5	34364-26-6
carbon black respirable	Not available.	0.1-1	1333-86-4
triethoxy(3-isocyanatopropyl)silane	Not available.	0.1-1	24801-88-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : No special measures are required. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.
- Inhalation** : No special measures required. If inhaled, remove to fresh air. Get medical attention if symptoms occur.
- Skin contact** : No special measures required. In case of contact, immediately flush skin with plenty of water. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Get medical attention if adverse health effects persist or are severe.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
wheezing and breathing difficulties
asthma
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Section 4. First aid measures

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : In case of major fire and large quantities: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Do not use water jet.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 nitrogen oxides
 metal oxide/oxides
 Aldehyde.
 traces of hydrogen cyanide

Special protective actions for fire-fighters : In case of major fire and large quantities: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Low release. For professional use only. Handling of product in very small amounts or in situations where release is highly unlikely
- For emergency responders** : Low release. See also the information in "For non-emergency personnel".

Environmental precautions : Low release. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

- Small spill** : Small Quantity. For professional use only. Absorb with an inert material and place in an appropriate waste disposal container.
- Large spill** : Small Quantity. For professional use only. Absorb with an inert material and place in an appropriate waste disposal container.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : No special measures are required for small quantities under normal and intended conditions of product use. For professional use only. Put on appropriate personal protective equipment (see Section 8). Handle with care and dispose in a safe manner.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
4,4'-methylenedi(cyclohexyl isocyanate)	<p>ACGIH TLV (United States, 4/2014). TWA: 0.005 ppm 8 hours. TWA: 0.054 mg/m³ 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin. CEIL: 0.01 ppm CEIL: 0.11 mg/m³</p> <p>NIOSH REL (United States, 10/2013). CEIL: 0.01 ppm CEIL: 0.11 mg/m³</p> <p>OSHA PEL (United States, 2/2013). Absorbed through skin. TWA: 5 mg/m³, (as CN) 8 hours.</p>
carbon black respirable	<p>OSHA PEL 1989 (United States, 3/1989). TWA: 3.5 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2013). TWA: 3.5 mg/m³ 10 hours. TWA: 0.1 mg of PAHs/cm³ 10 hours.</p> <p>OSHA PEL (United States, 2/2013). TWA: 3.5 mg/m³ 8 hours.</p> <p>ACGIH TLV (United States, 4/2014). TWA: 3 mg/m³ 8 hours. Form: Inhalable fraction</p>

Section 8. Exposure controls/personal protection

Appropriate engineering controls : No special measures are required for small quantities under normal and intended conditions of product use.

Environmental exposure controls : No special measures are required for small quantities under normal and intended conditions of product use.

Individual protection measures

Hygiene measures : No special measures are required for small quantities under normal and intended conditions of product use.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves Recommended: butyl rubber/Nitrile rubber.

Body protection : No special measures are required for small quantities under normal and intended conditions of product use.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : No special measures are required for small quantities under normal and intended conditions of product use.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. [Viscous.]

Color : Part A: Black.
Part B: Clear. to Amber.(Light)

Odor : Part A: low to Odorless.
Part B: Slight Ammonia.

Odor threshold : Not available.

pH : Not applicable.

Melting point : Not available.

Boiling point : $\geq 200^{\circ}\text{C}$ ($\geq 392^{\circ}\text{F}$)

Flash point : Closed cup: $\geq 143.33^{\circ}\text{C}$ ($\geq 290^{\circ}\text{F}$) [Tagliabue.]

Evaporation rate : ≤ 1 (water = 1) (Gels with exposure to humidity)

Flammability (solid, gas) : Not applicable.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : Not available.

Vapor density : ≥ 1 [Air = 1]

Section 9. Physical and chemical properties

Relative density	: 1.056
Solubility	: Insoluble in the following materials: cold water and hot water.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Dynamic (at 20°C): 3500 to 4500 mPa·s (3500 to 4500 cP)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
4,4'-methylenedi(cyclohexyl isocyanate)	LC50 Inhalation Dusts and mists	Rat	0.295 mg/l	4 hours
diethylmethylbenzenediamine carbon black respirable triethoxy(3-isocyanatopropyl) silane	LD50 Dermal	Rabbit	>10000 mg/kg	-
	LD50 Oral	Rat	9900 mg/kg	-
	LD50 Oral	Rat	472 mg/kg	-
	LD50 Oral	Rat	>15400 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	360 mg/m ³	4 hours

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
4,4'-methylenedi(cyclohexyl isocyanate)	Eyes - Mild irritant	Rabbit	-	100 microliters	-
	Eyes - Severe irritant	Rabbit	-	24 hours 100 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
carbon black respirable	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
4,4'-methylenedi(cyclohexyl isocyanate)	Category 3	Not applicable.	Respiratory tract irritation
methylenediphenyl diisocyanate	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
diethylmethylbenzenediamine	Category 2	Oral	kidneys, liver and pancreas
methylenediphenyl diisocyanate	Category 2	Not determined	lungs

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Section 11. Toxicological information

- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
 pain or irritation
 watering
 redness
- Inhalation** : Adverse symptoms may include the following:
 respiratory tract irritation
 coughing
 wheezing and breathing difficulties
 asthma
- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
Potential delayed effects : Not available.

Long term exposure

- Potential immediate effects** : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

- General** : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	5317.8 mg/kg
Dermal	12393.2 mg/kg
Inhalation (dusts and mists)	2.431 mg/l

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
4,4'-methylenedi(cyclohexyl isocyanate)	Acute LC50 1.2 mg/l Fresh water	Fish - Brachydanio rerio	96 hours
diethylmethylbenzenediamine	Acute EC50 0.5 mg/l	Daphnia	48 hours
methylenediphenyl diisocyanate	Acute EC50 3230 mg/l	Algae - Skeletonema costatum	96 hours
carbon black respirable	Acute EC50 37.563 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
4,4'-methylenedi(cyclohexyl isocyanate)	301F Ready Biodegradability - Manometric Respirometry Test	0 % - 28 days	-	-
methylenediphenyl diisocyanate	302C Inherent Biodegradability: Modified MITI Test (II)	0 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
4,4'-methylenedi(cyclohexyl isocyanate)	-	-	Not readily
methylenediphenyl diisocyanate	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
4,4'-methylenedi(cyclohexyl isocyanate)	6.11	10186	high
diethylmethylbenzenediamine	14.7	2.75	low
methylenediphenyl diisocyanate	4.51	200	low

Mobility in soil

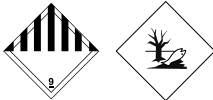
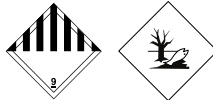
Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	UN3082	UN3082
UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-methylenedi(cyclohexyl isocyanate), diethylmethylbenzenediamine). Marine pollutant (4,4'-methylenedi(cyclohexyl isocyanate), diethylmethylbenzenediamine)	Environmentally hazardous substance, liquid, n.o.s. (4,4'-methylenedi(cyclohexyl isocyanate), diethylmethylbenzenediamine)
Transport hazard class(es)	-	9 	9 
Packing group	-	III	III
Environmental hazards	No.	Yes.	Yes.
Additional information	-	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules (EmS) F-A, S-F Special provisions 274, 335, 969	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8. Passenger and Cargo Aircraft Quantity limitation: 450 L Packaging instructions: 964 Cargo Aircraft Only Quantity limitation: 450 L Packaging instructions: 964 Limited Quantities - Passenger Aircraft Quantity limitation: 30 kg Packaging instructions: Y964 Special provisions A97, A158, A197

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 14. Transport information

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 4(a) final test rules:** diethylmethylbenzenediamine
TSCA 8(a) PAIR: 4,4'-methylenedi(cyclohexyl isocyanate); methylenediphenyl diisocyanate; triethyl phosphate
TSCA 8(c) calls for record of SAR: 4,4'-methylenedi(cyclohexyl isocyanate); methylenediphenyl diisocyanate; triethyl phosphate
TSCA 12(b) one-time export: diethylmethylbenzenediamine
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 307: 4,4'-methylenedi(cyclohexyl isocyanate)

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard
 Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
4,4'-methylenedi(cyclohexyl isocyanate)	10-30	No.	No.	No.	Yes.	No.
diethylmethylbenzenediamine	5-10	No.	No.	No.	Yes.	Yes.
methylenediphenyl diisocyanate	5-10	No.	No.	No.	Yes.	Yes.
Benzene, 1,1'-methylenebis [isocyanato-, homopolymer	1-5	Yes.	No.	No.	Yes.	No.
bismuth(3+) neodecanoate	1-5	No.	No.	No.	Yes.	No.
carbon black respirable	0.1-1	No.	No.	No.	No.	Yes.
triethoxy(3-isocyanatopropyl)silane	0.1-1	No.	No.	No.	Yes.	No.

Section 15. Regulatory information

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	4,4'-methylenedi(cyclohexyl isocyanate)	5124-30-1	10-30
Supplier notification	4,4'-methylenedi(cyclohexyl isocyanate)	5124-30-1	10-30

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

- Massachusetts** : The following components are listed: METHYLENE BIS(4-CYCLOHEXYLISOCYANATE)
- New York** : The following components are listed: Cyanides (soluble cyanide salts), not elsewhere specified
- New Jersey** : The following components are listed: METHYLENE BIS(4-CYCLOHEXYLISOCYANATE); 1,1-METHYLENE BIS(4-ISOCYANATOCYCLOHEXANE); DIISOCYANATES; CARBON BLACK
- Pennsylvania** : The following components are listed: CYCLOHEXANE, 1,1'-METHYLENEBIS [4-ISOCYANATO-; CARBON BLACK

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
carbon black respirable	Yes.	No.	No.	No.
carbon black non-respirable	Yes.	No.	No.	No.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	* 3
Flammability	1
Physical hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



Section 16. Other information

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue/Date of revision	: 08/07/2015
Date of previous issue	: No previous validation
Version	: 1
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

References	: HCS (U.S.A.)- Hazard Communication Standard International transport regulations
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✔ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.