Franklin International

Safety Data Sheet

GREENchoice Cove Base Adhesive

Section 1. Identification

GHS product identifier	: GREENchoice Cove Base Adhesive
Product type	: Liquid.
CAS #	: mixture
Address	: Franklin International 2020 Bruck Street Columbus OH 43207
Contact person	: Franklin Technical Services
Telephone	: (800) 877-4583
In case of emergency	: Franklin Security (614) 445-1300
Reference number	: 3638
Product code	: 3401
Date of revision	: 11/4/2015.
Print date	: 10/26/2016.
Chemtrec (24 Hour)	: (800) 424 - 9300
Chemtrec International	: (703) 527 - 3887
Relevant identified uses of t	he substance or mixture and uses advised against

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

Not applicable.

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN SENSITIZATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys) (oral) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 4.3%
GHS label elements	
Hazard pictograms	
Signal word	: Warning
Hazard statements	 Harmful if inhaled. Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure if swallowed. (kidneys)
Precautionary statements	

Section 2. Hazards identification : Read label before use. Keep out of reach of children. If medical advice is needed. General have product container or label at hand. Wear protective gloves. Wear eye or face protection. Use only outdoors or in a well-Prevention 2 ventilated area. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Response : Get medical attention if you feel unwell. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. 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 eve irritation persists: Get medical attention. : Dispose of contents and container in accordance with all local, regional, national and **Disposal** international regulations. Hazards not otherwise : None known. classified

Section 3. Composition/information on ingredients

Hazardous ingredients

United States

Name	CAS number	%
urea	57-13-6	1 - 5
2-diethylaminoethanol	100-37-8	1 - 5
ethanediol	107-21-1	0.1 - 0.5

Canada

Name	CAS number	%
5 1 15	27138-31-4	1-5
urea 2-diethylaminoethanol	57-13-6 100-37-8	1 - 5 1 - 5
ethanediol	107-21-1	0.1 - 0.5

Mexico

<u>Mexico</u>						Classification			
Name	CAS number			IDLH	н	F	R	Special	
2-diethylaminoethanol urea	100-37-8 57-13-6	UN1993 Not available.	1 - 5 1 - 5	100 ppm -	3 2	2 0	0 0	-	
oxydipropyl dibenzoate	27138-31-4	Not available.	1 - 5	-	2	0	0	-	

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 or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects	
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: Irritating to mouth, throat and stomach.
Over-exposure signs/sympto	<u>ms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Indication of immediate medic	al 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.

Date of issue/Date of revision	: 11/4/2015.
--------------------------------	--------------

Section 4. First aid measures

Protection of first-aiders

: 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-fighti	ing measures
Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
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
Special protective actions for fire-fighters	 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, protect	tive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: 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 co	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Advice on general 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, occupational hygiene 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**, : Do not store below the following temperature: 0°C (32°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool including any and well-ventilated area, away from incompatible materials (see Section 10) and food incompatibilities and drink. 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

United States

Occupational exposure limits

Ingredient name	Exposure limits
urea	AIHA WEEL (United States, 10/2011).
	TWA: 10 mg/m ³ 8 hours.
2-diethylaminoethanol	ACGIH TLV (United States, 3/2015). Absorbed through skin.
	TWA: 2 ppm 8 hours.
	TWA: 9.6 mg/m ³ 8 hours.
	OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.
	TWA: 10 ppm 8 hours.
	TWA: 50 mg/m ³ 8 hours.
	NIOSH REL (United States, 10/2013). Absorbed through skin.
	TWA: 10 ppm 10 hours.
	TWA: 50 mg/m³ 10 hours.
	OSHA PEL (United States, 2/2013). Absorbed through skin.
	TWA: 10 ppm 8 hours.
	TWA: 50 mg/m ³ 8 hours.
ethanediol	ACGIH TLV (United States, 3/2015).
	C: 100 mg/m³ Form: Aerosol
	OSHA PEL 1989 (United States, 3/1989).
	CEIL: 50 ppm
	CEIL: 125 mg/m ³

<u>Canada</u>

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/ m³	Other	ppm	mg/ m³	Other	ppm	mg/ m³	Other	Notations
2-diethylaminoethanol	US ACGIH 3/2015	2	9.6	-	-	-	-	-	-	-	[1]
	AB 4/2009	2	9.6	-	-	-	-	-	-	-	[1] [1] [1]
	BC 5/2015	2	-	-	-	-	-	-	-	-	[1]
	ON 7/2015	2	9.6	-	-	-	-	-	-	-	[1]
	QC 1/2014	10	48	-	-	-	-	-	-	-	[1] [a]
ethanediol	US ACGIH 3/2015	-	-	-	-	-	-	-	100	-	[a]
	AB 4/2009	-	-	-	-	-	-	-	100	-	[3] [b]
	BC 5/2015	-	-	-	-	-	-	-	100	-	[a]
		-	10	-	-	20	-	-	-	-	[C]
		-	-	-	-	-	-	50	-	-	[a] [c] [d]
Date of issue/Date of revision	· 11/4/2015	I	1					l			<u>ا</u> 5

GREENchoice Cove Base Adhesive											
Section 8. Exposure con	trols/perso	nal p	orote	ectior	า						
	ON 7/2015 QC 1/2014	-	-	-	- 50	- 127	-	-	100 -		[b] [e]
urea	US AIHA 10/2011	-	10	-	-	-	-	-	-	-	

[1]Absorbed through skin. [3]Skin sensitization **Form:** [a]Aerosol [b]aerosol [c]Particulate [d]Vapour [e]vapour and mist

<u>Mexico</u>

Occupational exposure limits

Ingredient	Exposure limits
2-diethylaminoethanol	NOM-010-STPS (Mexico, 9/2000). Absorbed through skin. LMPE-PPT: 10 ppm 8 hours. LMPE-PPT: 50 mg/m ³ 8 hours.

Consult local authorities for acceptable exposure limits.

Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measur	es	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
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.
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
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	:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance Physical state : Liquid. [Paste.] Color : Beige. : Characteristic. Odor : Not available. **Odor threshold** рΗ : 6 to 8 **Melting point** : Not available. : 100°C (212°F) **Boiling point Flash point** : Closed cup: >93.333°C (>200°F) [Setaflash.] : 48.71 g/l VOC (less water, less exempt solvents) **Relative density** : 1.38885

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.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
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
urea	LD50 Dermal	Rabbit	>21000 mg/kg	-
	LD50 Oral	Rat	8471 mg/kg	-
2-diethylaminoethanol	LC50 Inhalation Vapor	Rat	4.6 mg/l	4 hours
	LD50 Oral	Rat	1300 mg/kg	-
ethanediol	LC50 Inhalation Vapor	Rat	10.92 mg/l	4 hours
	LD50 Oral	Rat	4700 mg/kg	-

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
urea	Skin - Mild irritant	Human	-	72 hours 22 milligrams Intermittent	-
Skin - Moderate irritant	Skin - Moderate irritant	Human	-	24 hours 20 Percent	-
2-diethylaminoethanol	Eyes - Severe irritant	Rabbit	-	5 milligrams	-
Skin - Mild irritant	Skin - Mild irritant	Rabbit	-	500 milligrams	-
ethanediol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Eyes - Mild irritant	Eyes - Mild irritant	Rabbit	-	1 hours 100 milligrams	-
Eyes - Moderate irritant	Eyes - Moderate irritant	Rabbit	-	6 hours 1440	-
ate of issue/Date of revision :	11/4/2015.	-		Versio	n :4.2 7

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
urea	Acute EC50 6573.1 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 3910000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 22.5 ppt Fresh water	Fish - Oreochromis mossambicus - Young	96 hours
	Chronic NOEC 2 g/L Fresh water	Fish - Heteropneustes fossilis	30 days
2-diethylaminoethanol	Acute EC50 44 mg/l	Algae - Scenedesmus subspicatus	72 hours
	Acute EC50 83.6 mg/l	Crustaceans	48 hours
	Acute LC50 147 mg/l	Fish - Leuciscus idus	96 hours
ethanediol	Acute EC50 10940 mg/l	Algae - Selenastrum capriocornutum	96 hours
	Acute LC50 13140000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
	Acute LC50 41000000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 8050000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 10000 mg/l	Algae - Selenastrum capriocornutum	96 hours

Conclusion/Summary : Not available.

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
urea	-	-	Readily
2-diethylaminoethanol	-	-	Readily
ethanediol	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
urea	<-1.73	>10	low
2-diethylaminoethanol	0.21	<6.1	low
ethanediol	-1.36	10	low

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

Section 13. Disposal considerations

Disposal methods : The generation o of this product, so requirements of e regional local aut via a licensed wa

: 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

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.

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

Section 15. Regulatory information

U.S. Federal regulations	: TSCA 8(a) PAIR: Poly(oxy-1,2-ethanediyl), α-[(1,1,3,3-tetramethylbutyl)phenyl]-ω- hydroxy-					
	TSCA 8(a) (TSCA 8(a) CDR Exempt/Partial exemption: Not determined				
	United Stat 8b):	es inventory (TSCA	All components are listed or exempted.			
	Commerce	control list precursor	: 2-diethylaminoethanol			
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed					
Clean Air Act Section 602 Class I Substances	: Not listed					
Clean Air Act Section 602 Class II Substances	: Not listed					
<u>SARA 302/304</u>						
Composition/information	on ingredients					
No products were found.						
SARA 304 RQ	: Not applicat	ble.				
<u>SARA 311/312</u>						
Classification		acute) health hazard ronic) health hazard				
Composition/information	on ingredients					

Section 15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
urea	1 - 5	No.	No.	No.	Yes.	No.
2-diethylaminoethanol	1 - 5	Yes.	No.	No.	Yes.	No.
ethanediol	0.1 - 0.5	No.	No.	No.	Yes.	Yes.

State regulations

Massachusetts	: The following components are listed: N,N-DIETHYLETHANOLAMINE
New York	: None of the components are listed.
New Jersey	 The following components are listed: DIETHYLAMINOETHANOL; ETHANOL, 2- (DIETHYLAMINO)-
Pennsylvania	: The following components are listed: ETHANOL, 2-(DIETHYLAMINO)-

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

I	ngredient name	Cancer			Maximum acceptable dosage level
(ethanediol	No.	Yes.	No.	No.

Canada

Canadian lists

Canadian NPRI

: None of the components are listed.

CEPA Toxic substances

: None of the components are listed.

Canada inventory

: Not determined.

ŝ,

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

<u>Mexico</u>

Classification

I Chemicals



International regulations	
International lists	 Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined. Japan inventory: Not determined. Korea inventory: Not determined. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): Not determined. Taiwan inventory (CSNN): Not determined.
Europe	: Not determined.
Chemical Weapons Convention List Schedule	: Not listed

11/13

Section 15. Regulatory information

Chemical Weapons: Not listedConvention List Schedule: Not listedII Chemicals: Not listedConvention List Schedule: Not listedIII Chemicals: Not listed

Section 16. Other information

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



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.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

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.

Date of issue/Date of revision	: 11/4/2015.	Version: 4.2	12/13
References	: Not available.		
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and I IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficien MARPOL 73/78 = International Convention for the Prevent 1973 as modified by the Protocol of 1978. ("Marpol" = mari UN = United Nations 	nt ion of Pollution From Sh	ips,
Koy to abbroviations			
Version	: 4.2		
Date of previous issue	: 11/4/2015.		
Date of issue/Date of revision	: 11/4/2015.		
Date of printing	: 10/26/2016.		
<u>History</u>			

Section 16. Other information

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.