

# **SAFETY DATA SHEET**

**Bonding Liquid** 

# Section 1. Identification

GHS product identifier	: Bonding Liquid
Other means of identification	: Not available.
Product code	: 0921788, 0921789, 0921983, 0921984
Product type	: Liquid.
Product use	: Dental Products MONOMER FOR POLYMETHACRYLATE RESINS; IMPREGNATION OF CONCRETE.
Relevant identified uses o	f the substance or mixture and uses advised against
Not applicable.	
Supplier's details	: Keystone Industries 52 West King Street Myerstown, PA 17067 (856) 663-4700
Emergency telephone number (with hours of operation)	: (800) 535-5053
Section 2. Hazar	ds 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	: FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2

mixture SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

GHS label elements Hazard pictograms		
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Signal word	Danger
Hazard statements	Highly flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. May cause respiratory irritation.
Precautionary statements	
Prevention	Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion- proof electrical, ventilating, lighting and all material-handling equipment. Use only non- sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

### Section 2. Hazards identification

Response	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
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	: Substance
Other means of identification	: Not available.

#### **CAS number/other identifiers**

CAS number

: Not available.

May contain one or more of the following components in quantities considered hazardous:

Ingredient name	CAS number	EC number	%
methyl methacrylate	80-62-6	201-297-1	100.00

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 necessary 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. 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.	
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 if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.	

### Section 4. First aid measures

Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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Most important symptoms/e	ffects, acute and delayed	
Potential acute health effect	<u>xts</u>	
Eye contact	: No known significant effects or critical hazards.	
Inhalation	: May cause respiratory irritation.	
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.	
Ingestion	: No known significant effects or critical hazards.	
Over-exposure signs/symp	utoms	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing	
Skin contact	: Adverse symptoms may include the following: redness irritation	
Ingestion	: No specific data.	
Indication of immediate medical attention and special treatment needed, if necessary		
Notes to physician	<ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</li> </ul>	
Specific treatments	: No specific treatment.	
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-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide

### Section 5. Fire-fighting measures

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
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, protec	tiv	e 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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 specialized 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	nta	ainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.
Lanua au III		Cten look if without rick. Move containers from anill area. Llos enable proof tools and

Large spill
 Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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 ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
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.
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## Section 7. Handling and storage

Conditions for safe storage,	1	Store in accordance with local regulations. Store in a segregated and approved area.
including any		Store in original container protected from direct sunlight in a dry, cool and well-ventilated
incompatibilities		area, away from incompatible materials (see Section 10) and food and drink. Store
		locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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
methyl methacrylate	ACGIH TLV (United States, 3/2016). Skin
	sensitizer.
	TWA: 50 ppm 8 hours.
	STEL: 100 ppm 15 minutes.
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 100 ppm 8 hours.
	TWA: 410 mg/m <sup>3</sup> 8 hours.
	NIOSH REL (United States, 10/2013).
	TWA: 100 ppm 10 hours.
	TWA: 410 mg/m <sup>3</sup> 10 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 100 ppm 8 hours.
	TWA: 410 mg/m <sup>3</sup> 8 hours.

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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
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 measu	<u>ires</u>	
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		

### Section 8. Exposure controls/personal 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
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	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

### Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	: Liquid.	
Color	: Colorless.	
Odor	: Characteristic.	
рН	: Not available.	
Melting point	: -48°C (-54.4°F)	
Boiling point	: 102°C (215.6°F)	
Flash point	: Closed cup: 10°C (50°F)	
Lower and upper explosive	: Lower: 2.1%	
(flammable) limits	Upper: 12.5%	
Vapor pressure	: 3.7 kPa (27.75 mm Hg) [room temperature]	
Vapor density	: 3.5 [Air = 1]	
Relative density	: 0.95	
Solubility	: Not available.	
Solubility in water	: 15.3 g/l	
Partition coefficient: n-	: 1.38	
octanol/water		
Auto-ignition temperature	: 400°C (752°F)	
Viscosity	: Not available.	
<u>Aerosol product</u>		
Heat of combustion	: -26.52 kJ/g	

# 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	: Hazardous reactions or instability may occur under certain conditions of storage or use.

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### Section 10. Stability and reactivity

Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
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
methyl methacrylate	LC50 Inhalation Vapor LD50 Dermal LD50 Oral	Rabbit	78000 mg/m³ >5 g/kg 7872 mg/kg	4 hours - -

**Classification** 

Π	Product/ingredient name	OSHA	IARC	NTP
	methyl methacrylate	-	3	-

#### Specific target organ toxicity (single exposure)

Name	•••	Route of exposure	Target organs
methyl methacrylate	Category 3	Not applicable.	Respiratory tract irritation
methyl methacrylate	Category 3	Not applicable.	Respiratory tract irritation

Information on the likely routes of exposure	: Not available.	
Potential acute health effects		
Eye contact	: No known significant effects or critical hazards.	
Inhalation	: May cause respiratory irritation.	
Skin contact	: Causes skin irritation. May cause an allergic skin reaction	on.
Ingestion	: No known significant effects or critical hazards.	
Symptoms related to the phy Eye contact	<ul> <li>sical, chemical and toxicological characteristics</li> <li>Adverse symptoms may include the following: pain or irritation watering redness</li> </ul>	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing	
Skin contact	: Adverse symptoms may include the following: redness irritation	
Ingestion	: No specific data.	

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

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### Section 11. Toxicological information

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 eff	ects
Not available.	
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
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

Not available.

# Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
methyl methacrylate	Acute LC50 130000 µg/l Fresh water	Fish - Pimephales promelas - Adult	96 hours

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
methyl methacrylate	1.38	-	low
methyl methacrylate	1.38		low

#### Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

### Section 13. Disposal considerations

	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
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### Section 13. Disposal considerations

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

#### United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #		Reference number
Methyl methacrylate (I,T); 2-Propenoic acid, 2-methyl-, methyl ester (I,T)	-	Listed	U162

#### Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	ΙΑΤΑ
UN number	UN1247	UN1247	UN1247	UN1247	UN1247	UN1247
UN proper shipping name	Methyl methacrylate monomer, stabilized	Methyl methacrylate monomer, stabilized	Methyl methacrylate monomer, stabilized	Methyl methacrylate monomer, stabilized	Methyl methacrylate monomer, stabilized	Methyl methacrylate monomer, stabilized
Transport hazard class(es)	3 Transfer close	3	3	3	3	3
Packing group	11	П	11	11	11	II
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	Reportable guantity 1000 lbs / 454 kg [126.25 gal / 477.89 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).				-

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.

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### Section 14. Transport information

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

# Section 15. Regulatory information

		-						
U.S. Federal regulations	:	<ul> <li>TSCA 8(a) CDR Exempt/Partial exemption: Not determined</li> <li>United States inventory (TSCA 8b): All components are listed or exempted.</li> <li>Clean Water Act (CWA) 311: Bonding Liquid</li> </ul>					oted.	
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	:	Listed						
Clean Air Act Section 602 Class I Substances	:	Not liste	d					
Clean Air Act Section 602 Class II Substances	:	Not liste	d					
DEA List I Chemicals (Precursor Chemicals)	:	Not liste	d					
DEA List II Chemicals (Essential Chemicals)	;	Not liste	d					
SARA 302/304 Composition/information	<u>on</u>	<u>ingredier</u>	<u>nts</u>					
No products were found.								
SARA 304 RQ	:	Not appl	icable.					
SARA 311/312 Classification	:	Fire haz Immedia	ard ate (acute) he	alth haza	rd			
Composition/information	on	<u>ingredier</u>	<u>nts</u>					
Name			%	Fire hazard	Sudden release of	Reactive	Immediate (acute) bealth	Delayed (chronic) bealth

Name	70	hazard	release of pressure		(acute) health	chronic) health hazard
methyl methacrylate	100.00	Yes.	No.	No.	Yes.	No.

#### **SARA 313**

	Product name	CAS number	%
Form R - Reporting requirements	Bonding Liquid	-	100.00
Supplier notification	Bonding Liquid	-	100.00

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: METHYL METH/	ACRYLATE
New York	<ul> <li>The following components are listed: Methyl methacryl methyl ester</li> </ul>	late; 2-Propenoic acid, 2-methyl-,
New Jersey	<ul> <li>The following components are listed: METHYL METH/ ACID, 2-METHYL-, METHYL ESTER</li> </ul>	ACRYLATE; 2-PROPENOIC
Pennsylvania	: The following components are listed: 2-PROPENOIC / ESTER	ACID, 2-METHYL-, METHYL
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### Section 15. Regulatory information

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Canada inventory	: All components are listed or exempted.
International regulations	
International lists	<ul> <li>Australia inventory (AICS): All components are listed or exempted.</li> <li>China inventory (IECSC): All components are listed or exempted.</li> <li>Japan inventory (ENCS): All components are listed or exempted.</li> <li>Japan inventory (ISHL): All components are listed or exempted.</li> <li>Korea inventory: All components are listed or exempted.</li> <li>Malaysia Inventory (EHS Register): All components are listed or exempted.</li> <li>New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.</li> <li>Philippines inventory (PICCS): All components are listed or exempted.</li> <li>Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted.</li> </ul>
Chemical Weapons Convention List Schedule I Chemicals	: Not listed
Chemical Weapons Convention List Schedule II Chemicals	: Not listed
Chemical Weapons Convention List Schedule III 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.)



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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**

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### Section 16. Other information

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Version	: 1.01
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 = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
References	: Not available.

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.

Information contained within this SDS is only to be distributed as required by law.

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