SAFETY DATA SHEETS

This SDS packet was issued with item:

073430220

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

073430238 073430246 073430253 073430303 073430311 073430329 073430337 073430386 073430394 073430402 073430410 073430485 073430493 073430501 073430519 073430584 073430592 073430600 073430618 073430709 073430725 073430741 075350400

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

076784151

616 Hollywood Ave, Cherry Hill, NJ 08002

Section I - Product and Company Identification

Product Name: TRI EPOXY
Chemical Name: EPOXY

Family: Resin Die Material Product # Starting with Manufacturer: Keystone Industries / TRIDYNAMICS

5920400

Emergency Phone Numbers: (800)-535-5053 **Information Contacts:** (856)-663-4700

Product Use: Dental Models Formula: Proprietary Mixture

Section II – Composition Information on Ingredients

Chemical Identity	CAS Numbers	Percent (by wt)	Exposure OSHA	Limits ACGIH	Carcinogen
			TWA/STEL	TWA/STEL	IARC/NTP/OSHA
Phenol, 4 4' (1- Methylethylidine) BIS	25085-99-8	<60	N/E	N/E	N/E
Aluminum Oxide	1344-28-1	< 50	N/E	NE	N/E
Iron Oxides;	Mixture	<1	N/E	N/E	N/E
Black, Blue, Green					
N/E - None Established	N/A-Not				
N/DA- No Data Available	Applicable N/R -				
	Not Reviewed				

Section III - Hazards Identification

EMERGENCY OVERVIEW

- May cause skin irritation
- May cause eye irritation
- Avoid prolonged or repeated breathing of fumes, mist and dust of cured material

Potential Health Effects, Signs and Symptoms of Exposure:

Primary Route of Entry Skin contact; Eye contact; Ingestion

Eye Direct contact with this material may cause eye irritation.

Skin Contact may cause skin sensitization, an allergic reaction which becomes evident on re-exposure.

Ingestion Single dose oral toxicity is low. Swallowing a small amount during normal handling is not likely to

cause harmful effects, swallowing large amount may be harmful.

Inhalation Low volatility makes vapor inhalation unlikely. Aerosol can be irritating.

Sub-Chronic Effects No significant toxicological effects were observed in rats exposed by the oral route.

Section IV - First Aid Measures

First Aid for Eye: Immediately flush eyes with water for 15 min. Get medical attention.

First Aid for Skin: Wash skin with soap & water. Remove contaminated clothing and wash before

reuse. Get medical attention if irritation persists. Solvents should not be used to clean hands or skin because it may cause material to penetrate faster into the skin.

First Aid for Remove to fresh air. Keep warm and quiet. If not breathing, give artificial

Inhalation: respiration.

First Aid for Do not induce vomiting. Give victim one or two glasses of water. Seek medical

Material Safety Data Sheet

TRI EPOXY

Page 2 of 5

Ingestion: attention.

Section V - Fire Fighting Measures

Flash Point	Flammable Limit	Auto-ignition Temperature		
(degrees F/degrees C)	(vol%)	(vol%)		
480 degrees F	N/A	N/A		

Method

Extinguishing Media: Use carbon dioxide, foam, dry chemical or water fog to extinguish fire.

Fire Fighting Use water spray to cool fire-exposed containers. Use water spray to disperse

Instructions: vapors if the spill or leak has not ignited.

Unusual Hazards: This material may polymerize if container is exposed to high heat (during fire).

Polymerization increases pressure of the container and may result in violent

rupture.

Section VI - Accidental Release Measures

Spill or Release Procedures - For small spills, absorb with cloth or other inert material. For large spills, dike to prevent spill from contaminating soil, sanitary sewer and storm water severs. Clean up with inert absorbent material and dispose of following federal, state and local regulations.

Section VII - Handling and Storage

Handling • Avoid

• Avoid contact with eyes, skin and clothing. Wash hands after using these materials. Follow standard industrial hygiene procedures.

Storage

 Keep container closed when not in use. Warm storage (130 degrees F) is recommended.

Explosion Hazard

 Possible polymerization due to exposure to high heat increases pressure of the container and may result in violent rupture.

Section VIII - Exposure Controls / Personal Protective Equipment

Exposure Controls: Good general ventilation should be sufficient to control airborne levels of

vapors.

Personal Protective Equipment:

General: None

Eye/ Face Safety glasses with side shields are recommended.

Protection:

Skin Protection: Wear chemical resistant gloves such as polyvinyl alcohol.

Respiratory If material generates fumes when heated, use NIOSH/MSHA approved

Protection respirators.

Section IX - Physical and Chemical Properties

Material Safety Data Sheet

TRI EPOXY

Page 3 of 5

Appearance	Odor & Odor Threshold	pН	Specific Gravity	Viscosity	% Volatile	
Green, Pink, Blue	Odorless (unless	N/A	1.15-1.5	>15000	Non volatile	
Thick, creamy	heated)					
material						

Boiling Point/ Freezing Point	Decomposition Temperature	Octanol/Water Partitioning Coefficient	Vapor Pressure:	Vapor Density	Evaporation Rate	Ignition	Solubility In Water
>500 degrees F	N/E	Log Po/w N/E	0.03 mm Hg	N/E	N/A	N/A	N/E

Section X - Stability and Reactivity

Stability:

Stable at normal temperature & storage conditions.

Hazardous Decomposition Products:

Thermal decomposition may produce various hydrocarbons and irritating, acrid vapors.

Conditions to Avoid:

Contamination by acids, strong bases and amines.

Incompatibility (Materials to Avoid):

Avoid contact with strong oxidizing agents, mineral acids & bases and amines.

Hazardous Polymerization:

Will not occur unless exposed to high heat. Reaction with some curing agents may produce considerable heat. Run-a-way cure my char and decompose resin systems.

Section XI - Toxicological Information

Section XII - Ecological Information

Ecotoxicological Information

Acute Toxicity to Fish LC50/EC50 1-10mg N/E Sewage Bacteria

Acute Toxicity to Invertebrates Acute Toxicity to Algae Bioconcentration 100-3000 Log/Pow N/E N/E N/E

Chemical Fate Information

Biodegradability Below detectable limits.

Chemical Oxygen Demand 2.35 p/p. The atmosphere half life is 1-92 hr.

Section XIII - Disposable Concentrations

Waste Disposal Method: Disposal of this material is not regulated by RCRA. Dispose according to local, state and federal regulations.

Section XIV - Transport Information

• DOT(USA): Class Not regulated

• ICAO Status: Not Regulated

IMDG Status: Class not regulated

Section XV - Regulatory Information

US	Federal	Regulations

US Federal Regulations	
Clean Air Act: HAP/ODS	This product contains the following hazardous air pollutants (HAP's) as defined by the U. S. Clean Air Act: • None
	This product does not contain any Class 1 or Class 2 ODS.
Clean Water Act:	This product does not contain any Class 1 of Class 2 ODS. This product contains the following Hazardous Substances as defined by the CWA: None
	This product contains substances that are a Priority Pollutant or Toxic Pollutant under the CWA:
	• None
FDA: Food Packaging Status	This product has not been cleared by the FDA for use in food packaging and/or other applications as an indirect food additive.
Occupational Safety and Health	This product is considered to be a hazardous chemical under the OSHA Hazard
Act	Communication Standard. Its hazards are:
	Immediate (acute) health hazard
RCRA	This product is not considered to be a hazardous waste under RCRA (40 CFR 261) RCRA Code:
	• None
SARA Title III: Section 302 (TPQ)	This product contains no chemicals regulated under Sec. 302 as extremely hazardous substances that carry a TPQ.
SARA Title III: Section 302 (RQ)	This product does not contain chemicals regulated under Section 304 as extremely hazardous chemicals for emergency release notification ("CERCLA" List). • None
SARA Title III: Section 311-312:	This product is considered hazardous under the OSHA Hazard Communication Standard and is regulated under Section 311-312 (40 CFR 370). Its hazards are: • Immediate (acute) health hazard
SARA Title III: Section 313:	This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: • None
TSCA Section 8(b): Inventory:	This product contains no chemicals listed on the TSCA inventory or otherwise complies with TSCA premanufacture notification requirements.
TSCA Significant New Use Rule:	None of the chemicals in this material have a SNUR under TSCA.

State Regulations

State Regulations	
CA Right-to-Know Law:	NONE
California No Significant Risk Rule:	NONE
MA Right-to-Know Law:	NONE
NJ Right-to-Know Law:	NONE
PA Right-to-Know Law:	NONE
FL Right-to-Know Law:	NONE
MN Right-to-Know Law:	NONE

International Regulations

CDSL: Canadian Inventory	Bisphenol A epoxy, CAS# 25085-99-8 DSL regulatory status: Included
(on Canadian Transitional List)	WHMIS: DB2: Toxic
EINECS: European Inventory:	HAZARD SYMBOLS: Xi

Section XVI - Other Information

Material Safety Data Sheet

TRI EPOXY

Page 5 of 5

Hazard Rating System HMIS: Health 1 /Flammability 0/ Reactivity 1

NFPA: Health 1 /Flammability 0/ Reactivity 1

Date:02/21/00

Supersedes Date: 7/99

The information presented herein was obtained from sources considered to be reliable. However, this information is provided without any warranty, expressed or implied, regarding its correctness or suitability for consumers intended use and/or application. For this and other reasons, we assume no responsibility and expressly disclaim liability for loss, damage or expense arising out of any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared expressly for this product. Use the materials only as directed. If the product is used as a component of another product, the information contained within the MSDS may not be applicable. If one could have any concerns with or problems understanding this MSDS form, please direct all questions to INFOTRAC, Chemical Emergency Resources System at 1(800) 535-5053.

SAFETY DATA SHEET



Ероху

Section 1. Identification

GHS product identifier : Epoxy

Other means of identification

: Not available.

Product code : Various
Product type : Liquid.

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

Not applicable.

Supplier's details : Keystone Industries

616 Hollywood Ave. Cherry Hill, NJ 08002 (856) 663-4700

Emergency telephone number (with hours of operation) : (800) 535-5053

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 : ACUTE TOXICITY (oral) - Category 4 substance or mixture : CARCINOGENICITY - Category 1A

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 96.8%

GHS label elements

Hazard pictograms :





Signal word : Danger

Hazard statements : Harmful if swallowed. May cause cancer.

Precautionary statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have

been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

arink or smoke when using this product. Wash hands thoroughly after handling.

Response : IF exposed or concerned: Get medical attention. IF SWALLOWED: Call a POISON

CENTER or physician if you feel unwell. Rinse mouth.

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.

Date of issue/Date of revision : 7/2/2014. Date of previous issue : No previous validation. Version : 1 1/11

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of : Not available.
identification

CAS number/other identifiers

CAS number : Not applicable.

Ingredient name	CAS number	EC number	INCI Name	%
crystalline silica, respirable powder	14808-60-7	238-878-4	Quartz	10 - 25
butyl glycidyl ether	2426-08-6	219-376-4	Butyl glycidyl ether	1 - 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 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 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 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 : Flush contaminated skin with plenty of 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. 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 necessary, call a poison center or physician. 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
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Ingestion : Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.

Date of issue/Date of revision : 7/2/2014. Date of previous issue : No previous validation. Version : 1 2/11

Section 4. First aid measures

Ingestion : No specific data.

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

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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 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 metal oxide/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, protective 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 nonemergency 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 containment and cleaning up

Date of issue/Date of revision : 7/2/2014. Date of previous issue : No previous validation. Version

Section 6. Accidental release measures

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). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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 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
crystalline silica, respirable powder	OSHA PEL Z3 (United States, 2/2013).
	TWA: 250 MPPCF / (%SiO2+5) 8 hours.
	Form: Respirable
	TWA: 10 MG/M3 / (%SiO2+2) 8 hours. Form:
	Respirable
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 0.1 mg/m³, (as quartz) 8 hours. Form:
	Respirable dust
	ACGIH TLV (United States, 6/2013).
	TWA: 0.025 mg/m ³ 8 hours. Form:
	Respirable fraction
	NIOSH REL (United States, 10/2013).
	TWA: 0.05 mg/m³ 10 hours. Form: respirable
	dust
butyl glycidyl ether	ACGIH TLV (United States, 6/2013).

Section 8. Exposure controls/personal protection

Absorbed through skin. Skin sensitizer.

TWA: 3 ppm 8 hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 25 ppm 8 hours. TWA: 135 mg/m³ 8 hours.

NIOSH REL (United States, 10/2013).

CEIL: 5.6 ppm 15 minutes. CEIL: 30 mg/m³ 15 minutes. OSHA PEL (United States, 2/2013).

TWA: 50 ppm 8 hours. TWA: 270 mg/m³ 8 hours.

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, 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 measures

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. 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: safety glasses with side-shields.

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.

Date of issue/Date of revision : 7/2/2014. Date of previous issue : No previous validation. Version : 1 5/11

Epoxy

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. Color : Various

Odor Not available. pН Not available. **Melting point** Not available. **Boiling point** Not available. Flash point : Not available.

Lower and upper explosive

(flammable) limits

: Not available.

: Not available. Vapor pressure Vapor density Not available. **Relative density** : Not available. **Solubility** Not available. Solubility in water : Not available. Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available. **Viscosity** : Not available.

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
butyl glycidyl ether	LD50 Oral	Rat	1660 mg/kg	-

Irritation/Corrosion

Date of issue/Date of revision : 7/2/2014. Date of previous issue : No previous validation. Version

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
butyl glycidyl ether	Eyes - Mild irritant	Rabbit	-	91 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 750	-
				Micrograms	
	Skin - Mild irritant	Rabbit	-	72 hours 454	-
				milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				milligrams	

Classification

Product/ingredient name	OSHA	IARC	NTP
crystalline silica, respirable powder	-	1	Known to be a human carcinogen.

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Ingestion: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

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

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : May cause 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

Date of issue/Date of revision: 7/2/2014.Date of previous issue: No previous validation.Version: 1

Section 11. Toxicological information

Route	ATE value
Oral	1730.1 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
butyl glycidyl ether	Acute EC50 3.9 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
butyl glycidyl ether	0.63	-	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

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. 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	IATA
N number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
N proper hipping name	-	-	-	-	-	-
ransport azard class(es)	-	-	-	-	-	-
acking group	-	-	-	-	-	-
nvironmental azards	No.	No.	No.	No.	No.	No.
nvironmental				No.	- No.	

Date of issue/Date of revision

: 7/2/2014.

Date of previous issue

: No previous validation.

Version : 1

8/11

Epoxy Section 14. Transport information Additional

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

information

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) PAIR: 2-methoxy-1-methylethyl acetate; Siloxanes and Silicones, di-Me,

reaction products with silica

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined.

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

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	 _	Sudden release of pressure		Immediate (acute) health hazard	Delayed (chronic) health hazard
crystalline silica, respirable powder butyl glycidyl ether	No. Yes.		No. No.	No. Yes.	Yes. No.

State regulations

Massachusetts : The following components are listed: SILICA, CRYSTALLINE, QUARTZ; N-BUTYL

GLYCIDYL ETHER (BGE); TITANIUM DIOXIDE

New York : None of the components are listed. Ероху

Section 15. Regulatory information

New Jersey

: The following components are listed: SILICA, QUARTZ; QUARTZ (SiO2); n-BUTYL GLYCIDYL ETHER; OXIRANE, (BUTOXYMETHYL)-; TITANIUM DIOXIDE; TITANIUM OXIDE (TiO2)

Pennsylvania

: The following components are listed: QUARTZ (SIO2); OXIRANE, (BUTOXYMETHYL)-; TITANIUM OXIDE (TIO2)

Canada inventory

: Not determined.

International regulations

International lists

: Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted.

Japan inventory: Not determined. Korea inventory: Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Chemical Weapons

Convention List Schedule

I Chemicals

hamicale

Chemical Weapons
Convention List Schedule

II Chemicals

Chemical Weapons

Convention List Schedule

III Chemicals

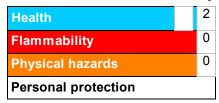
: Not listed

: Not listed

: 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 : 7/2/2014. Date of previous issue : No previous validation. Version : 1 10/13

Section 16. Other information

History

Date of printing : 7/2/2014.

Date of issue/Date of : 7/2/2014.

revision

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 : 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.

Date of issue/Date of revision : 7/2/2014. Date of previous issue : No previous validation. Version : 1 11/11