

## 1. Product and company identification

<b>Product name</b>	: TYZOR® GBO
<b>Material uses</b>	: Catalysts / Cross-linking agent. / Adhesion promoters
<b>Supplier/Manufacturer</b>	: Dorf Ketal Specialty Catalysts LLC 11200 Westheimer Road, Suite 400 Houston, TX 77042 U.S.A. Tel: 713-343-2377 Fax: 832-649-7615 ehss@dorketalusa.com
<b>Validation date</b>	: 25/08/2011.
<b>Prepared by</b>	: Atrion Regulatory Services, Inc.
<b><u>In case of emergency</u></b>	: For Chemical Emergency ONLY (in the case of fire, leak, spill, exposure or accident) call CHEMTREC at +1 (703) 527-3887 For ALL other emergencies call the Dorf Ketal office or +91 983 353 5744

## 2. Hazards identification

<b>Physical state</b>	: Liquid. [Clear.]
<b>Color</b>	: Amber./Red.
<b>Odor</b>	: Alcohol-like.
<b><u>Emergency overview</u></b>	
<b>Signal word</b>	: WARNING!
<b>Hazard statements</b>	: FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE BIRTH DEFECT HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA. POSSIBLE DEVELOPMENTAL HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE ADVERSE DEVELOPMENTAL EFFECTS, BASED ON ANIMAL DATA.
<b>Precautions</b>	: Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not get in eyes or on skin or clothing. Avoid exposure during pregnancy. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
<b>OSHA/HCS status</b>	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>Routes of entry</b>	: Dermal contact. Eye contact. Inhalation. Ingestion.
<b><u>Potential acute health effects</u></b>	
<b>Inhalation</b>	: Toxic by inhalation. Can cause central nervous system (CNS) depression. Irritating to respiratory system.
<b>Ingestion</b>	: Can cause central nervous system (CNS) depression.
<b>Skin</b>	: Toxic in contact with skin. Irritating to skin.
<b>Eyes</b>	: Severely irritating to eyes. Risk of serious damage to eyes.
<b><u>Potential chronic health effects</u></b>	

## 2. Hazards identification

- Chronic effects** : Contains material that may cause target organ damage, based on animal data. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : Contains material which may cause birth defects, based on animal data.
- Developmental effects** : Contains material which may cause developmental abnormalities, based on animal data.
- Fertility effects** : No known significant effects or critical hazards.
- Target organs** : Contains material which may cause damage to the following organs: mucous membranes, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), ears, eye, lens or cornea.

### Over-exposure signs/symptoms

- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
respiratory tract irritation  
coughing  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Eyes** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

### 3. Composition/information on ingredients

Name	CAS number	%
Propan-2-ol	67-63-0	10-30
Methanol	67-56-1	10-30
butan-1-ol	71-36-3	10-30

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.

### 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- 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.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

### 5. Fire-fighting measures

- Flammability of the product** : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Extinguishing media**
- Suitable** : In case of fire, use alcohol-resistant foam. Use dry chemical or CO<sub>2</sub>.
- Not suitable** : Do not use water.
- Special exposure hazards** : 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.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides
- 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.

## 6. Accidental release measures

- Personal precautions** : 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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- 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 for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. 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). Use spark-proof tools and explosion-proof equipment. 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.

## 7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). 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. Avoid exposure during pregnancy. 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. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. 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. 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. Freezing will affect physical condition but will not damage. Thaw and mix before using.

## 8. Exposure controls/personal protection

### United States

Ingredient	Exposure limits
Propan-2-ol	<p><b>ACGIH TLV (United States, 2/2010).</b> Notes: Refers to Appendix A -- Carcinogens.</p> <p><b>ACGIH 2003 Adoption</b>            STEL: 400 ppm 15 minute(s).            TWA: 200 ppm 8 hour(s).</p> <p><b>NIOSH REL (United States, 6/2009).</b>            STEL: 1225 mg/m<sup>3</sup> 15 minute(s).            STEL: 500 ppm 15 minute(s).            TWA: 980 mg/m<sup>3</sup> 10 hour(s).            TWA: 400 ppm 10 hour(s).</p> <p><b>OSHA PEL (United States, 6/2010).</b>            TWA: 980 mg/m<sup>3</sup> 8 hour(s).            TWA: 400 ppm 8 hour(s).</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>            TWA: 400 ppm 8 hour(s).            TWA: 980 mg/m<sup>3</sup> 8 hour(s).            STEL: 500 ppm 15 minute(s).            STEL: 1225 mg/m<sup>3</sup> 15 minute(s).</p>
Methanol	<p><b>ACGIH TLV (United States, 2/2010). Absorbed through skin.</b>            TWA: 200 ppm 8 hour(s).            TWA: 262 mg/m<sup>3</sup> 8 hour(s).            STEL: 250 ppm 15 minute(s).            STEL: 328 mg/m<sup>3</sup> 15 minute(s).</p> <p><b>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.</b>            STEL: 250 ppm 15 minute(s).            STEL: 325 mg/m<sup>3</sup> 15 minute(s).            TWA: 200 ppm 8 hour(s).            TWA: 260 mg/m<sup>3</sup> 8 hour(s).</p> <p><b>NIOSH REL (United States, 6/2009). Absorbed through skin.</b>            TWA: 200 ppm 10 hour(s).            TWA: 260 mg/m<sup>3</sup> 10 hour(s).            STEL: 250 ppm 15 minute(s).            STEL: 325 mg/m<sup>3</sup> 15 minute(s).</p> <p><b>OSHA PEL (United States, 6/2010). Absorbed through skin.</b>            TWA: 200 ppm 8 hour(s).            TWA: 260 mg/m<sup>3</sup> 8 hour(s).</p>
butan-1-ol	<p><b>ACGIH TLV (United States, 2/2010).</b>            TWA: 20 ppm 8 hour(s).</p> <p><b>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.</b>            CEIL: 50 ppm            CEIL: 150 mg/m<sup>3</sup></p> <p><b>NIOSH REL (United States, 6/2009). Absorbed through skin.</b>            CEIL: 50 ppm            CEIL: 150 mg/m<sup>3</sup></p> <p><b>OSHA PEL (United States, 6/2010).</b>            TWA: 100 ppm 8 hour(s).            TWA: 300 mg/m<sup>3</sup> 8 hour(s).</p>

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : 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.
- 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.

### Personal protection

## 8. Exposure controls/personal protection

- Respiratory** : 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.
- Hands** : 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.
- Eyes** : 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 or dusts.
- Skin** : 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.
- 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.

## 9. Physical and chemical properties

- Physical state** : Liquid. [Clear.]
- Flash point** : Closed cup: 12°C (53.6°F) [Pensky-Martens.]
- Color** : Amber./Red.
- Odor** : Alcohol-like.
- Boiling/condensation point** : 70°C (158°F)
- Relative density** : 0.9 to 1 [25°C [77°F]]
- Volatility** : 40% (w/w)
- Viscosity** : Not available.
- Solubility** : Soluble in the following materials: cold water and hot water.

## 10. Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : Keep away from heat. 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.
- Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials and metals. Hydrolyzes in water to form 2-propanol and titanium dioxide.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
  
Under normal conditions of storage and use, hazardous polymerization will not occur.

## 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Propan-2-ol	LC50 Inhalation Vapor	Rat	39.3 mg/l	4 hours
	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
Methanol	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
butan-1-ol	LC50 Inhalation Vapor	Rat	24000 mg/m3	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	790 mg/kg	-
TYZOR® GBO	LD50 Oral	Rat	3310 mg/kg	-

### Chronic toxicity

Not available.

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Propan-2-ol	Eyes - Moderate irritant	Rabbit	-	-	-
	Eyes - Severe irritant	Rabbit	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-
Methanol	Eyes - Moderate irritant	Rabbit	-	-	-
	Skin - Moderate irritant	Rabbit	-	-	-
butan-1-ol	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Eyes - Severe irritant	Rabbit	-	0.005 Milliliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

### Sensitizer

Not available.

### Carcinogenicity

#### Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Propan-2-ol	A4	3	-	-	-	-

### Mutagenicity

Not available.

### Teratogenicity

Not available.

### Reproductive toxicity

Not available.



## 12. Ecological information

**Ecotoxicity** : No known significant effects or critical hazards.

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Propan-2-ol	Acute LC50 1400000 to 1950000 ug/L Marine water Acute LC50 >1400000 ug/L	Crustaceans - Crangon crangon Fish - Gambusia affinis - 20 to 30 mm	48 hours 96 hours
Methanol	Acute EC50 16.912 mg/L Marine water Acute LC50 2500000 ug/L Marine water Acute LC50 3289 mg/L Fresh water Acute LC50 >100000 ug/L Fresh water	Algae - Ulva pertusa Crustaceans - Crangon crangon - Adult Daphnia - Daphnia magna - Neonate - <24 hours Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 0.2 to 0.5 g	96 hours 48 hours 48 hours 96 hours
butan-1-ol	Acute EC50 1983000 ug/L Fresh water Acute LC50 100 mg/L Fresh water	Daphnia - Daphnia magna - 6 to 24 hours Fish - Lepomis macrochirus - 0.1 g	48 hours 96 hours

### Persistence/degradability

Not available.

## 13. Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. 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. 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.




Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14. Transport information



## 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>DOT Classification</b>	UN1993	Flammable liquids, n.o.s. (Propan-2-ol, Methanol)	3	II		<b>Limited quantity</b> Yes.  <b>Packaging instruction</b> <b>Passenger aircraft</b> Quantity limitation: 5 L  <b>Cargo aircraft</b> Quantity limitation: 60 L  <b>Special provisions</b> IB2, T7, TP1, TP8, TP28
<b>IMDG Class</b>	UN1993	FLAMMABLE LIQUID, N.O.S. (Propan-2-ol, Methanol)	3	II		<b>Emergency schedules (EmS)</b> F-E, _S-E_
<b>IATA-DGR Class</b>	UN1993	Flammable liquid, n.o.s. (Propan-2-ol, Methanol)	3	II		<b>Passenger and Cargo Aircraft</b> Quantity limitation: 5 L Packaging instructions: 353 <b>Cargo Aircraft Only</b> Quantity limitation: 60 L Packaging instructions: 364 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 1 L Packaging instructions: Y341

PG\* : Packing group

## 15. Regulatory information

**HCS Classification** : Flammable liquid  
Toxic material  
Irritating material  
Target organ effects

**U.S. Federal regulations** : **TSCA 8(a) IUR**: Partial exemption  
**United States inventory (TSCA 8b)**: All components are listed or exempted.  
**SARA 302/304/311/312 extremely hazardous substances**: No products were found.  
**SARA 302/304 emergency planning and notification**: No products were found.  
**SARA 302/304/311/312 hazardous chemicals**: Methanol; Propan-2-ol; butan-1-ol  
**SARA 311/312 MSDS distribution - chemical inventory - hazard identification**:  
 Methanol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;  
 Propan-2-ol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;  
 butan-1-ol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard  
**Clean Air Act (CAA) 112 accidental release prevention**: No products were found.

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

**Clean Air Act Section 602 Class I Substances** : Not listed

## 15. Regulatory information

**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 313

	Product name	CAS number	Concentration
<b>Form R - Reporting requirements</b>	Propan-2-ol	67-63-0	10-30
	Methanol	67-56-1	10-30
	butan-1-ol	71-36-3	10-30
<b>Supplier notification</b>	Propan-2-ol	67-63-0	10-30
	Methanol	67-56-1	10-30
	butan-1-ol	71-36-3	10-30

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

### State regulations

**Massachusetts** : The following components are listed: ISOPROPYL ALCOHOL; METHANOL; N-BUTYL ALCOHOL

**New York** : The following components are listed: Methanol; 1-Butanol

**New Jersey** : The following components are listed: ISOPROPYL ALCOHOL; 2-PROPANOL; METHYL ALCOHOL; METHANOL; n-BUTYL ALCOHOL; 1-BUTANOL

**Pennsylvania** : The following components are listed: 2-PROPANOL; METHANOL; 1-BUTANOL

### California Prop. 65

Not available.

**United States inventory (TSCA 8b)** : All components are listed or exempted.

**Canada inventory** : Not determined.

### International regulations

**International lists** :

- Australia inventory (AICS)**: Not determined.
- China inventory (IECSC)**: Not determined.
- Japan inventory**: Not determined.
- Korea inventory**: Not determined.
- New Zealand Inventory of Chemicals (NZIoC)**: Not determined.
- Philippines inventory (PICCS)**: Not determined.

**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

## 16. Other information

### Label requirements

: FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE BIRTH DEFECT HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA. POSSIBLE DEVELOPMENTAL HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE ADVERSE DEVELOPMENTAL EFFECTS, BASED ON ANIMAL DATA.

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

:

Health	*	2
Flammability		3
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs 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.

### Date of issue

: 25/08/2011.

### Date of previous issue

: No previous validation.

### Version

: 1

Indicates information that has changed from previously issued version.

### Notice to reader

## 16. Other information

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.