



# BIMAX® MAA

## Safety Data Sheet

Issue date: 07/05/2023

Revision date: 02/28/2024

Supersedes 07/05/2023 Version: 1.1

## SECTION 1: Identification

### 1.1. Identification

Product name	: BIMAX® MAA
Product code	: 9002A
Product form	: Substance
Physical state	: Liquid
Formula	: C <sub>4</sub> H <sub>6</sub> O <sub>2</sub>
Synonyms	: 2-METHYLPROPENOIC ACID
Chemical family	: METHACRYLATE
Chemical name	: METHACRYLIC ACID

### 1.2. Recommended use and restrictions on use

Recommended use	: Laboratory chemicals
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### 1.3. Supplier

**GELEST, INC.**  
 158 Industrial Road  
 Glen Rock, PA 17327  
**USA**  
 T 717-227-1774 - F 717-227-1775 - (M-F): 8:00 AM - 5:30 PM EST  
[info@gelest.com](mailto:info@gelest.com) - [www.gelest.com](http://www.gelest.com)

### 1.4. Emergency telephone number

Emergency number	: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)
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## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS US classification

Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Acute toxicity (dermal) Category 3	H311	Toxic in contact with skin
Acute toxicity (inhalation: dust, mist) Category 4	H332	Harmful if inhaled
Skin corrosion/irritation Category 1A	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation
Flammable liquids Category 4	H227	Combustible liquid
Full text of H statements : see section 16		

### 2.2. GHS Label elements, including precautionary statements

#### GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H227 - Combustible liquid  
 H302+H332 - Harmful if swallowed or if inhaled  
 H311 - Toxic in contact with skin

### Precautionary statements (GHS US)

H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage  
H335 - May cause respiratory irritation  
: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P260 - Do not breathe fume, gas, mist, spray, vapors.  
P261 - Avoid breathing gas, fume, mist, spray, vapors.  
P264 - Wash hands thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.  
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.  
P302+P352 - If on skin: Wash with plenty of water.  
P303+P361+P353 - If on skin (or hair): take off immediately all contaminated clothing. rinse skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a poison center or doctor.  
P312 - Call a poison center or doctor if you feel unwell.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P322 - Specific treatment (see supplemental first aid instruction on this label)  
P330 - Rinse mouth.  
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.  
P363 - Wash contaminated clothing before reuse.  
P370+P378 - In case of fire: Use media other than water to extinguish.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 - Keep in a cool place  
P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Hazards not otherwise classified (HNOC)

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Name : BIMAX® MAA  
CAS-No. : 79-41-4

Name	Product identifier	%	GHS US classification
methacrylic acid	CAS-No.: 79-41-4	99.5	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact	: Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Specific hazards arising from the chemical

Fire hazard	: Combustible liquid.
Explosion hazard	: No direct explosion hazard.
Reactivity	: No dangerous reactions known under normal conditions of use.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
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#### 6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin, eyes and clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

- For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
- Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Do not breathe fume, gas, mist, spray, vapors.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Keep in a cool, well-ventilated place away from heat.
- Storage conditions : Avoid direct light. Store in a well-ventilated place. In case of fire: keep cylinder cool by spraying with water. Store locked up. Keep container tightly closed.
- Incompatible materials : Oxidizing agent. Strong acids. Bases. Peroxides. Amines.
- Storage temperature : < 32 °C
- Packaging materials : Store always product in container of same material as original container.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### methacrylic acid (79-41-4)

#### USA - ACGIH - Occupational Exposure Limits

Local name	Methacrylic acid
ACGIH OEL TWA	20 ppm
Remark (ACGIH)	TLV® Basis: Skin & eye irr
Regulatory reference	ACGIH 2024

### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

#### Hand protection:

Protective gloves

**Eye protection:**

Safety glasses

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Appearance	: Clear.
Molecular mass	: 86.09 g/mol Source: HSDB
Color	: No data available
Odor	: No data available
Odor threshold	: $\geq$ ppm
pH	: 2 – 2.2 Temp.: 20 °C Concentration: ( $\approx$ )100 g/L
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: 16 °C Source: HSDB
Freezing point	: No data available
Boiling point	: 162 °C Atm. press.: 1013 hPa
Flash point	: 68 °C Atm. press.: 1013 hPa
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 1 mm Hg
Relative vapor density at 20°C	: 2.97 Source: HSDB
Relative density	: 1.0153 Source: HSDB
Density	: 1.015 g/ml
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: 0.93 Source: HSDB
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: $\approx$ 1.36 mm <sup>2</sup> /s Temp.: 'other:' Parameter: 'kinematic viscosity (in mm <sup>2</sup> /s)'
Viscosity, dynamic	: 1.38 mPa·s Temp.: 'other:' Parameter: 'dynamic viscosity (in mPa s)'
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No dangerous reactions known under normal conditions of use.

**10.2. Chemical stability**

Polymerization can occur at elevated temperatures. Contains the following stabilizer(s): MEHQ.

**10.3. Possibility of hazardous reactions**

Polymerization can occur at elevated temperature.

**10.4. Conditions to avoid**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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### 10.5. Incompatible materials

Oxidizing agent. Strong acids. Bases. Peroxides. Amines.

### 10.6. Hazardous decomposition products

No data available.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.  
 Acute toxicity (dermal) : Toxic in contact with skin.  
 Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

#### BIMAX® MAA (79-41-4)

ATE US (oral)	1326.633 mg/kg body weight
ATE US (dermal)	502.513 mg/kg body weight
ATE US (dust, mist)	1.508 mg/l/4h

#### methacrylic acid (79-41-4)

LD50 oral rat	1320 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	500 – 1000 mg/kg body weight Animal: rabbit, Guideline: other:
LC50 Inhalation - Rat	7.1 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:

Skin corrosion/irritation : Causes severe skin burns.  
 pH: 2 – 2.2 Temp.: 20 °C Concentration: (≈)100 g/L  
 Serious eye damage/irritation : Causes serious eye damage.  
 pH: 2 – 2.2 Temp.: 20 °C Concentration: (≈)100 g/L  
 Respiratory or skin sensitization : Not classified  
 Germ cell mutagenicity : Not classified  
 Carcinogenicity : Not classified ()  
 (None of the components in this product at concentrations >0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.)  
 Reproductive toxicity : Not classified  
 STOT-single exposure : May cause respiratory irritation.  
 STOT-repeated exposure : Not classified

#### methacrylic acid (79-41-4)

LOAEC (inhalation,rat,gas,90 days)	350 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEC (inhalation,rat,gas,90 days)	100 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Guideline: EPA OPPTS 870.3465 (90-Day Inhalation Toxicity), Guideline: other:

Aspiration hazard : Not classified  
 Symptoms/effects after inhalation : May cause respiratory irritation.  
 Symptoms/effects after skin contact : Burns.  
 Symptoms/effects after eye contact : Serious damage to eyes.  
 Symptoms/effects after ingestion : Burns.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

methacrylic acid (79-41-4)	
LC50 - Fish [1]	85 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 130 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	45 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	20 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	53 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	10 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '35 d'

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

methacrylic acid (79-41-4)	
Partition coefficient n-octanol/water (Log Pow)	0.93 Source: HSDB

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations





### 13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

## SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
<b>14.1. UN number</b>			
2531	UN2531	2531	2531
<b>14.2. Proper Shipping Name</b>			
Methacrylic acid, stabilized	METHACRYLIC ACID, STABILIZED	METHACRYLIC ACID, STABILIZED	Methacrylic acid, stabilized

DOT	TDG	IMDG	IATA
<b>Transport document description</b>			
UN2531 Methacrylic acid, stabilized, 8, II	UN2531 METHACRYLIC ACID, STABILIZED, 8, II	UN 2531 METHACRYLIC ACID, STABILIZED, 8, II	UN 2531 Methacrylic acid, stabilized, 8, II
<b>14.3. Transport hazard class(es)</b>			
8	8	8	8
	 Not applicable		
<b>14.4. Packing group</b>			
II	II	II	II
<b>14.5. Environmental hazards</b>			
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available			

### 14.6. Special precautions for user

<b>DOT</b>	
UN-No.(DOT)	: UN2531
DOT Special Provisions (49 CFR 172.102)	: 41 - This material at the Packing Group II hazard criteria level may be transported in Large Packaging. 387 - When materials are stabilized by temperature control, the provisions of §173.21(f) of this subchapter apply. When chemical stabilization is employed, the person offering the material for transport shall ensure that the level of stabilization is sufficient to prevent the material as packaged from dangerous polymerization at 50 °C (122 °F). If chemical stabilization becomes ineffective at lower temperatures within the anticipated duration of transport, temperature control is required and is forbidden by aircraft. In making this determination factors to be taken into consideration include, but are not limited to, the capacity and geometry of the packaging and the effect of any insulation present, the temperature of the material when offered for transport, the duration of the journey, and the ambient temperature conditions typically encountered in the journey (considering also the season of year), the effectiveness and other properties of the stabilizer employed, applicable operational controls imposed by regulation (e.g.requirements to protect from sources of heat, including other cargo carried at a temperature above ambient) and any other relevant factors. The provisions of this special provision will be effective until January 2, 2019, unless we terminate them earlier or extend them beyond that date by notice of a final rule in the Federal Register. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP18 - The temperature of this material must be maintained between 18 C (64.4 F) and 40 C (104 F) while in transportation. Portable tanks containing solidified methacrylic acid must not be reheated during transportation. TP30 - This hazardous material may only be transported in insulated tanks.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154



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DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 30 L
DOT Vessel Stowage Location	: C - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 25 - Protected from sources of heat, 40 - Stow "clear of living quarters", 53 - Stow "separated from" alkaline compounds, 58 - Stow "separated from" cyanides

### TDG

UN-No. (TDG)	: UN2531
TDG Special Provisions	: 155 - (1) If these dangerous goods are stabilized by temperature control, they must be offered for transport, handled and transported in accordance with section 7.1.6 of the UN Recommendations. (2) If chemical stabilization is employed, the person offering the means of containment for transport must ensure that the level of stabilization will prevent a dangerous polymerization of the dangerous goods at a bulk mean temperature of 50°C in the case of a small means of containment or an intermediate bulk container (IBC) or, in the case of a large means of containment that is not an IBC, at a bulk mean temperature of 45°C. (3) If chemical stabilization may become ineffective at lower temperatures within the anticipated duration of transport, temperature control is required. In determining whether chemical stabilization may become ineffective at lower temperatures, the person offering the means of containment for transport must take at least the following factors into consideration: (a) the capacity and geometry of the means of containment and the effect of any insulation; (b) the temperature of the dangerous goods when offered for transport; (c) the duration of the transport and the seasonal ambient temperature conditions typically encountered during transport; and (d) the effectiveness and other physical or chemical properties of the stabilizer employed. SOR/2017-137
Explosive Limit and Limited Quantity Index	: 1 L
Excepted quantities (TDG)	: E2
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 1 L
Emergency Response Guide (ERG) Number	: 153P

### IMDG

Special provision (IMDG)	: 386
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP2, TP18, TP30
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	: C
Stowage and handling (IMDG)	: SW1, SW2
Segregation (IMDG)	: SGG1, SG36, SG49
Properties and observations (IMDG)	: Colourless, combustible liquid with a specific odour. Miscible with water. Polymerizes readily above its melting point (15°C), thereby generating heat and possible risk of explosion; should therefore be properly stabilized. Cooling below melting point (15°C) followed by subsequent reheating can release uninhibited monomer that readily polymerizes. Decomposes when heated, evolving toxic gases. Causes burns to skin, eyes and mucous membranes.

### IATA

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y840
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 855

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CAO max net quantity (IATA) : 30L  
Special provision (IATA) : A209  
ERG code (IATA) : 8L

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

### 15.2. International regulations

#### CANADA

##### methacrylic acid (79-41-4)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

##### methacrylic acid (79-41-4)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

##### methacrylic acid (79-41-4)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

Full text of H-phrases::

H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation

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### Abbreviations and acronyms

: Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor.

### NFPA health hazard

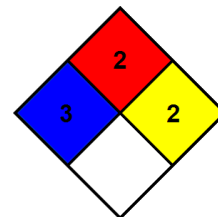
: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

### NFPA fire hazard

: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

### NFPA reactivity

: 2 - Materials that readily undergo violent chemical change at elevated temperatures and pressures.



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SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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