

SAFETY DATA SHEETS

This SDS packet was issued with item:

072068781

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

072068799

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).

072068427 072068435 072068443 072068450 072068468 072068476 072068484 072068492 072088482

Safety Data Sheet

acc. to OSHA HCS 29 CFR 1910.1200

Printing date 04/21/2015

Version US-EN-Rev 1

Reviewed on 04/20/2015

1 Identification

- **Product identifier**

- **Trade name:** NATURE-CRYL POUR (Liquid)

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

Dental material

The product is intended for professional use.

To avoid risks for humans and environment obtain instructions.

- **Application of the substance / the mixture** Manufacture of dental prothesis

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

GC America Inc.

3737 W. 127th Street

Alsip, IL 60803

USA

sds@gcamerica.com

- **Information department:** Regulatory Affairs

- **Emergency telephone number:**

During normal opening times (Mon.-Fri. 8:00 AM-5:00 PM CST): +1 (708) 597-0900

Transportation (CHEMTREC®) Emergency Telephone No. +1 (800) 424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Acute Tox. 3 H301 Toxic if swallowed.

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Additional information:**

The information provided is in regards to the toxicity and hazard rating(s) of the individual component(s) in the formulation. The associated risk(s) depends on the route(s) of exposure. The hazard rating system is based entirely on the existence of the risk(s) and does not take into account the likelihood of reduced risk(s) through proper usage and handling.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02



GHS05



GHS06



GHS08

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Trade name: NATURE-CRYL POUR (Liquid)

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· **Signal word** Danger· **Hazard-determining components of labeling:**

methyl methacrylate (MMA)

dimethacrylate**

catalyst**

UV-light absorber**

· **Hazard statements**

Highly flammable liquid and vapor.

Toxic if swallowed.

Harmful in contact with skin or if inhaled.

Causes severe skin burns and eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not breathe dusts or mists.

Wear protective gloves / eye protection / face protection.

If swallowed: Immediately call a poison center/doctor.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

1.1 % of the mixture consists of component(s) of unknown toxicity.

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 3

Reactivity = 2

· **HMIS-ratings (scale 0 - 4)**

Health = 2

Fire = 3

Reactivity = 2

· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**· **Description:** Mixture of the substances listed below with nonhazardous additions.· **Dangerous components:**

80-62-6	methyl methacrylate (MMA)	90-100%
	dimethacrylate**	1-5%
	catalyst**	1-5%

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UV-light absorber**

< 0.5%

Additional information:

If a substance is marked with **, then substance is a trade secret. This is allowed under OSHA's Hazard Communication Standard (HCS) as a trade secret and under GHS as Confidential Business Information (CBI).

4 First-aid measures

Description of first aid measures
General information:

Immediately remove any clothing soiled by the product.
If symptoms persist consult doctor.

After inhalation:

Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.
Do not use mouth to mouth or mouth to nose resuscitation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.
Seek medical treatment.

After eye contact:

Protect unharmed eye.
Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Do not induce vomiting; immediately call for medical help.
Rinse out mouth and then drink plenty of water.

Information for doctor:

Most important symptoms and effects, both acute and delayed Allergic reactions

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: CO₂, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents: Water

Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon monoxide and carbon dioxide

Carbon dioxide

Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove persons from danger area.

Keep away from ignition sources

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Avoid contact with the eyes and skin.

Wear protective clothing.

· **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

· **Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Absorb liquid components with liquid-binding material.

Dispose of the collected material according to regulations.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Observe instructions for use.

Ensure good ventilation/exhaustion at the workplace.

Do not inhale dust / smoke / mist.

Prevent formation of aerosols.

Avoid contact with the eyes and skin.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Do not spray on a naked flame or any incandescent material.

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store in a cool location.

Store only in unopened original receptacles.

· **Information about storage in one common storage facility:** Store away from foodstuffs.

· **Further information about storage conditions:**

Observe instructions for use / storage.

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

Store in a cool place.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

80-62-6 methyl methacrylate (MMA)

PEL Long-term value: 410 mg/m³, 100 ppm

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REL	Long-term value: 410 mg/m ³ , 100 ppm
TLV	Short-term value: 410 mg/m ³ , 100 ppm
	Long-term value: 205 mg/m ³ , 50 ppm
	(SEN) NIC-DSEN

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
- **Breathing equipment:** Suitable respiratory protective device recommended.
- **Protection of hands:** Protective gloves
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	Colorless
Odor:	Sweetish
Odor threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	99 °C (210 °F)

· Flash point: 10 °C (50 °F)

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: Undetermined.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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· Danger of explosion:	Heating may cause an explosion. Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	2.1 Vol %
Upper:	12.5 Vol %
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	0.939 g/cm ³ (7.836 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
VOC content:	97.9 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** Danger of polymerization.
- **Chemical stability** Stable at ambient temperature.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
Spontaneous polymerization can be caused in unstabilized product e.g. by ambient heat.
Danger of receptacles bursting because of high vapor pressure if heated.
Exothermic polymerization.
- **Conditions to avoid** Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- **Incompatible materials:**
Reacts with peroxides and other radical forming substances.
Reacts with amines.
Reacts with heavy metals.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** No further relevant information available.
- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.

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- **on the eye:**
Strong irritant with the danger of severe eye injury.
Irritating effect.
 - **Sensitization:**
Sensitization possible through inhalation.
Sensitization possible through skin contact.
 - **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Corrosive
Irritant
 - **Carcinogenic categories**
- | | |
|---|---|
| · IARC (International Agency for Research on Cancer) | |
| methyl methacrylate (MMA) | 3 |
- **NTP (National Toxicology Program)**
- | | |
|------------------------------------|--|
| None of the ingredients is listed. | |
|------------------------------------|--|
- **OSHA-Ca (Occupational Safety & Health Administration)**
- | | |
|------------------------------------|--|
| None of the ingredients is listed. | |
|------------------------------------|--|
- **Carcinogenic categories' legend:**
IARC Group 1: The agent is carcinogenic to humans.
IARC Group 2A: The agent is probably carcinogenic to humans.
IARC Group 2B: The agent is possibly carcinogenic to humans.
IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.
IARC Group 4: The agent is probably not carcinogenic to humans.
NTP K: Known to be human carcinogen.
NTP R: Reasonably anticipated to be human carcinogen.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT, ADR, IMDG, IATA	UN1247
· UN proper shipping name	
· DOT	Methyl methacrylate monomer, stabilized
· ADR	1247 Methyl methacrylate monomer, stabilized
· IMDG, IATA	METHYL METHACRYLATE MONOMER, STABILIZED
· Transport hazard class(es)	
· DOT	
	
· Class	3 Flammable liquids
· Label	3
· ADR, IMDG, IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, ADR, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
· EMS Number:	F-E,S-D
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· IMDG	
· Limited quantities (LQ)	1L

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· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN1247, Methyl methacrylate monomer, stabilized, 3, II

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **SARA (Superfund Amendments and Reauthorization Act)**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

methyl methacrylate (MMA)

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

methyl methacrylate (MMA)

E, NL

· **TLV (Threshold Limit Value established by ACGIH)**

methyl methacrylate (MMA)

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**

GHS02 GHS05 GHS06 GHS08

· **Signal word** Danger· **Hazard-determining components of labeling:**

methyl methacrylate (MMA)

dimethacrylate**

catalyst**

UV-light absorber**

· **Hazard statements**

Highly flammable liquid and vapor.

Toxic if swallowed.

Harmful in contact with skin or if inhaled.

Causes severe skin burns and eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

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Trade name: NATURE-CRYL POUR (Liquid)

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Do not breathe dusts or mists.

Wear protective gloves / eye protection / face protection.

If swallowed: Immediately call a poison center/doctor.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Department issuing SDS: Regulatory Affairs

Contact:

Regulatory Affairs

Telephone No. +1 (708) 597-0900

sds@gcamerica.com

Date of preparation / last revision 04/21/2015 / -

Abbreviations and acronyms:

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

HCS: Hazard Communication Standard (USA)

MSDS: Material Safety Data Sheet

SDS: Safety Data Sheet

ECHA: European Chemicals Agency

OSHA: Occupational Safety and Health Administration (USA)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1C: Skin corrosion/irritation, Hazard Category 1C

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Sources

- Manufacturers' MSDSs/SDSs

- OSHA (<https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html>)

- TOXNET (<http://toxnet.nlm.nih.gov/>)

- ECHA (<http://echa.europa.eu/>)

- EnviChem (www.echemportal.org)

Notes:

CAS Registry Number is a Registered Trademark of the American Chemical Society.

CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.

- * Data compared to the previous version altered.** This version replaces all previous versions.

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Disclaimer:

The information contained herein is believed to be true and accurate. However, all statements, recommendations or suggestions are made without any guarantee, representation or warranty, express or implied, on our part. Therefore, no warranty is made or to be implied that the information set out in this document is accurate or complete, and we accordingly exclude all liability in connection with the use of this information or the products referred to herein. All such risks are assumed by the purchaser/user. The information contained herein is also subject to change without notice. For the avoidance of doubt, however, nothing in this document excludes or limits our liability for death or personal injury caused by our negligence or for fraudulent misrepresentation.

US

Safety Data Sheet according to HPR, Schedule 1

Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

1 Identification

- **Product identifier**
- **Trade name:** NATURE-CRYL POUR (Liquid)
- **Application of the substance / the mixture** Manufacture of dental prothesis
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
GC America Inc.
3737 W. 127th Street
Alsip, IL 60803
USA

sds@gcamerica.com
- **Information department:** Regulatory Affairs
- **Emergency telephone number:**
During normal opening times (Mon.-Fri. 8:00 AM-5:00 PM CST): +1 (708) 597-0900
Transportation (CHEMTREC®) Emergency Telephone No. +1 (800) 424-9300

2 Hazard identification

- **Classification of the substance or mixture**

Flammable Liquids - Category 2	H225 Highly flammable liquid and vapour.
Skin Irritation - Category 2	H315 Causes skin irritation.
Eye Irritation - Category 2A	H319 Causes serious eye irritation.
Skin Sensitizer - Category 1	H317 May cause an allergic skin reaction.
Specific Target Organ Toxicity - Single Exposure - Category 3	H335 May cause respiratory irritation.
- **Additional information:**
The information provided is in regards to the toxicity and hazard rating(s) of the individual component(s) in the formulation. The associated risk(s) depends on the route(s) of exposure. The hazard rating system is based entirely on the existence of the risk(s) and does not take into account the likelihood of reduced risk(s) through proper usage and handling.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**
 
GHS02 GHS07
- **Signal word** Danger
- **Hazard-determining components of labeling:**
methyl methacrylate (MMA)
dimethacrylate**
catalyst**
UV-light absorber**

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/13/2018

Version CA-EN-Rev 1

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Trade name: NATURE-CRYL POUR (Liquid)

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- **Hazard statements**

Highly flammable liquid and vapour.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.

- **Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**

1.1 % of the mixture consists of an ingredient or ingredients of unknown acute toxicity.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 3
Reactivity = 2

- **HMIS-ratings (scale 0 - 4)**



Health = 2
Fire = 3
Reactivity = 2

3 Composition/Information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 80-62-6	methyl methacrylate (MMA)	60 - 100% w/w
	dimethacrylate**	1 - 5% w/w
	catalyst**	0.5 - 1.5% w/w
	UV-light absorber**	≤ 1% w/w

- **Additional information:**

If a substance is marked with **, then substance is a trade secret. This is allowed under OSHA's Hazard Communication Standard (HCS) as a trade secret and under GHS as Confidential Business Information (CBI).

4 First aid measures

- **Description of first aid measures**

- **General information:**

Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.

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Safety Data Sheet

according to HPR, Schedule 1

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- If symptoms persist consult doctor.
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.
Do not use mouth to mouth or mouth to nose resuscitation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Seek medical treatment.
- **After eye contact:**
Protect unharmed eye.
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** Allergic reactions
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water
- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
Carbon monoxide and carbon dioxide
Carbon dioxide
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Remove persons from danger area.
Keep away from ignition sources
Avoid contact with the eyes and skin.
Wear protective clothing.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Do not allow to penetrate the ground/soil.
- **Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Use neutralizing agent.
Absorb liquid components with liquid-binding material.
Dispose of the collected material according to regulations.
- **Reference to other sections**
See Section 7 for information on safe handling.

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CA

Safety Data Sheet

according to HPR, Schedule 1

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Version CA-EN-Rev 1

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Observe instructions for use.
Ensure good ventilation/exhaustion at the workplace.
Do not inhale dust / smoke / mist.
Prevent formation of aerosols.
Avoid contact with the eyes and skin.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Do not spray on a naked flame or any incandescent material.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store only in unopened original receptacles.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Observe instructions for use / storage.
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Store in a cool place.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.

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Breathing equipment:


Suitable respiratory protective device recommended.

Protection of hands:


Protective gloves

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Manufacturing sites:

Wear safety glasses with side shields (or goggles).

Distribution, Workplace, and Household Settings:

No special protective equipment required

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:
Form:

Liquid

Color:

Colorless

Odor:

Sweetish

Odor threshold:

Not determined.

pH-value:

Not determined.

Change in condition
Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

99 °C

Flash point:

10 °C

Flammability (solid, gaseous):

Not applicable.

Ignition temperature:

Undetermined.

Decomposition temperature:

Not determined.

Auto igniting:

Product is not self-igniting.

Danger of explosion:

Heating may cause an explosion.

Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

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· Explosion limits:	
Lower:	2.1 Vol %
Upper:	12.5 Vol %
· Vapor pressure:	Not determined.
· Density at 20 °C:	0.939 g/cm ³
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** Danger of polymerization.
- **Chemical stability** Stable at ambient temperature.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
Spontaneous polymerization can be caused in unstabilized product e.g. by ambient heat.
Danger of receptacles bursting because of high vapor pressure if heated.
Exothermic polymerization.
- **Conditions to avoid**
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- **Incompatible materials:**
Reacts with peroxides and other radical forming substances.
Reacts with amines.
Reacts with heavy metals.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** No further relevant information available.
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:**
Strong caustic effect.
Irritating effect.
- **Sensitization:**
Sensitization possible through inhalation.

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Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

Irritant

Carcinogenic categories
IARC (International Agency for Research on Cancer)

methyl methacrylate (MMA)

3

NTP (National Toxicology Program)

None of the ingredients is listed.

Carcinogenic categories' legend:

IARC Group 1: The agent is carcinogenic to humans.

IARC Group 2A: The agent is probably carcinogenic to humans.

IARC Group 2B: The agent is possibly carcinogenic to humans.

IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

IARC Group 4: The agent is probably not carcinogenic to humans.

NTP K: Known to be human carcinogen.

NTP R: Reasonably anticipated to be human carcinogen.

Repeated dose toxicity. No further relevant information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

No further relevant information available.

No further relevant information available.

12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:
Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:
General notes: Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Results of PBT and vPvB assessment
PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

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14 Transport information

- UN-Number - DOT, TDG, IMDG, IATA	UN1247
- UN proper shipping name - DOT - TDG - IMDG, IATA	Methyl methacrylate monomer, stabilized 1247 Methyl methacrylate monomer, stabilized METHYL METHACRYLATE MONOMER, STABILIZED
- Transport hazard class(es) - DOT 	
- Class - Label - TDG, IMDG, IATA 	3 Flammable liquids 3
- Class - Label	3 Flammable liquids 3
- Packing group - DOT, TDG, IMDG, IATA	II
- Environmental hazards: - Marine pollutant:	No
- Special precautions for user - EMS Number: - Stowage Category - Stowage Code	Warning: Flammable liquids F-E,S-D B SW2 Clear of living quarters.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
- TDG - Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- IMDG - Limited quantities (LQ) - Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

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- | | |
|---------------------------------|--|
| • UN "Model Regulation": | UN 1247 METHYL METHACRYLATE MONOMER, STABILIZED, 3, II |
|---------------------------------|--|

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **SARA (Superfund Amendments and Reauthorization Act)**

• Section 355 (extremely hazardous substances):
--

None of the ingredients is listed.

• Section 313 (Specific toxic chemical listings):
--

methyl methacrylate (MMA)

• TSCA (Toxic Substances Control Act):

dimethacrylate**

catalyst**

synergist**

UV-light absorber**

- **Canadian substance listings:**

• Canadian Domestic Substances List (DSL)
--

All ingredients are listed.

• Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

• Canadian Ingredient Disclosure list (limit 1%)

methyl methacrylate (MMA)

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger

- **Hazard-determining components of labeling:**

methyl methacrylate (MMA)

dimethacrylate**

catalyst**

UV-light absorber**

- **Hazard statements**

Highly flammable liquid and vapour.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

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Precautionary statements

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

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

- **Department issuing SDS:** Regulatory Affairs

- **Contact:**

Regulatory Affairs

Telephone No. +1 (708) 597-0900

sds@gcamerica.com

- **Date of preparation / last revision** 03/13/2018 / -

- **Abbreviations and acronyms:**

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

HCS: Hazard Communication Standard (USA)

MSDS: Material Safety Data Sheet

SDS: Safety Data Sheet

ECHA: European Chemicals Agency

OSHA: Occupational Safety and Health Administration (USA)

LEL: Lower Explosive Limit

UEL: Upper Explosive Limit

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

- **Sources**

- Manufacturers' MSDSs/SDSs

- OSHA (<https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html>)

- TOXNET (<http://toxnet.nlm.nih.gov/>)

- ECHA (<http://echa.europa.eu/>)

- EnviChem (www.echemportal.org)

- **Notes:**

CAS Registry Number is a Registered Trademark of the American Chemical Society.

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- *** Data compared to the previous version altered.** This version replaces all previous versions.

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