

Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

- **1** Identification
- · Product identifier
- · Trade name: ALIKE (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 Acute Toxicity (Oral) - Category 4 Acute Toxicity (Dermal) – Category 4 Acute Toxicity (Inhalation) - Category 4 H332 Harmful if inhaled. Skin Irritation - Category 2 Skin Sensitizer - Category 1

H225 Highly flammable liquid and vapour.

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- - H315 Causes skin irritation.
 - 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



· Signal word Danger

· Hazard-determining components of labeling: methyl methacrylate (MMA) methanol accelerant** dimethacrylate**

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Trade name: ALIKE (Liquid)

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 Hazard statements Highly flammable liquid and vapour. Harmful if swallowed, in contact with skin or if inhaled. Causes skin irritation. May cause an allergic skin reaction.

· Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Contaminated work clothing should not be allowed out of the workplace.

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]. Store in a well-ventilated place. Keep cool.

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

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



Fire = 3Reactivity = 2

· HMIS-ratings (scale 0 - 4)

HEALTH 2 Health = 23 Fire = 3FIRE Reactivity = 2 **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
CAS: 67-56-1	methanol	5 - 10% w/w
	dimethacrylate**	1 - 5% w/w
	accelerant**	0.5 - 1.5% w/w
	UV-light absorber**	0.5 - 1.5% 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.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

If symptoms persist consult doctor.

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· 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.	
If symptoms persist consult 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 Firefighting measures	
· Extinguishing media	
• Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.	
East offetty reaction up quickle over quickling agents . Weter	

- · 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 and carbon dioxide
- · Advice for firefighters
- Protective equipment:

Mouth respiratory protective device.

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.
 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.

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See Section 13 for disposal information.

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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:
		J	

CAS: 67-56-1 methanol

- EL Short-term value: 250 ppm Long-term value: 200 ppm Skin
- EV Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin

· 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.

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Safety Data Sheet according to HPR, Schedule 1

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Trade name: ALIKE (Liquid)

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:

Manufacturing sites: Wear safety glasses with side shields (or goggles). Distribution, Workplace, and Household Settings: No special protective equipment required

Information on basic physical and General Information	chemical properties	
Appearance:		
Form:	Liquid	
Color:	Colorless	
Odor:	Methacrylic	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	64 °C	
Flash point:	12 °C	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	Undetermined.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not self-igniting.	

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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:	Not determined.
· Relative density	Not determined.
· Vapor density	Not determined.
 Evaporation rate 	Not determined.
· Solubility in / Miscibility with	
Water:	Insoluble.
· Partition coefficient (n-octanol/wate	er): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	8.7 %
 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.

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11 Toxicological information

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· Informati		cological effects
	•	t are relevant for classification:
	56-1 metha	
Oral	LD50	13,000 mg/kg (rat (f+m))
Dermal	LD50	12,800 mg/kg (rabbit)
accelerar	nt**	
Oral	LD50	1,650 mg/kg (rat (f+m))
Dermal	LD50	> 2,000 mg/kg (rat (f+m))
Inhalative	LC50/4 h	254 mg/l (rat (f+m))
 on the ey Sensitiza Sensitizat 	in: Irritant i e: No irrita tion: ion possible	to skin and mucous membranes.
preparation Irritant • Carcinog • IARC (Inter-	enic categ	ories Agency for Research on Cancer)
methyl me	ethacrylate	(MMA) 3
hydroquin	one (HQ)	3
· NTP (Nati	ional Toxi	cology Program)
None of th	ne ingredie	nts is listed.
IARC Gro IARC Gro IARC Gro IARC Gro IARC Gro NTP K: Ki NTP R: R • Repeated • CMR effe No further	up 1: The a up 2A: The up 2B: The up 3: The a up 4: The a nown to be easonably I dose toxi cts (carcin relevant in	agent is carcinogenic to humans. agent is probably carcinogenic to humans. agent is prossibly carcinogenic to humans. agent is not classifiable as to its carcinogenicity to humans. agent is probably not carcinogenic to humans. human carcinogen. anticipated to be human carcinogen. city. No further relevant information available. nogenity, mutagenicity and toxicity for reproduction) nformation available.

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12 Ecological information

- · Toxicity
- · Aquatic toxicity:

CAS: 67-56-1 methanol

EC50/48h (static) 10,000 mg/l (daphnia magna) (static)

- intoxication
- 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: Generally not hazardous for 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: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

UN-Number DOT, TDG, IMDG, IATA	UN1993
· UN proper shipping name	
· DOT	Flammable liquids, n.o.s. (Methyl methacrylate monome stabilized, Methanol)
· TDG	1993 Flammable liquids, n.o.s. (Methyl methacrylat monomer, stabilized, Methanol)
· IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (METHY METHACRYLATE MONOMER, STABILIZED METHANOL)
· Transport hazard class(es)	
· DOT	
· Class	3 Flammable liquids

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· Label · TDG, IMDG, IATA	3
· Class	3 Flammable liquids
· Label	3
 Packing group DOT, TDG, IMDG, IATA 	II
 Environmental hazards: Marine pollutant: 	No
 Special precautions for user EMS Number: Stowage Category 	Warning: Flammable liquids F-E, <u>S-E</u> B
 Transport in bulk according to Annex MARPOL73/78 and the IBC Code 	Il of 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
· UN "Model Regulation":	UN 1993 FLAMMABLE LIQUIDS, N.O.S. (METHYL METHACRYLATE MONOMER, STABILIZED, METHANOL), 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)

methanol

· TSCA (Toxic Substances Control Act):

methanol

dimethacrylate**

accelerant**

UV-light absorber**

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

methyl methacrylate (MMA)

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methanol dimethacrvlate**

accelerant**

UV-light absorber**

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%)

methyl methacrylate (MMA)

methanol

- · GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Danger

• Hazard-determining components of labeling: methyl methacrylate (MMA) methanol accelerant** dimethacrylate**

Hazard statements Highly flammable liquid and vapour. Harmful if swallowed, in contact with skin or if inhaled. Causes skin irritation. May cause an allergic skin reaction.

· Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Contaminated work clothing should not be allowed out of the workplace.

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]. Store in a well-ventilated place. Keep cool.

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

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(Contd. of page 10) 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. 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. · 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

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