## **SAFETY DATA SHEETS**

## This SDS packet was issued with item:

072057248

N/A



MS001530

## COMPOSITE PRIMER MATERIAL SAFETY DATA SHEET

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### SECTION 1 - SOURCE/IDENTITY/USE INFORMATION

**DISTRIBUTOR** 

GC AMERICA INC. 3737 West 127th St. Alsip, Illinois, 60803 Telephone: 708-597-0900

Hours: Mon.- Fri. 8:00 am. - 5:00 pm. C.S.T. Transportation Emergency No. 800-424-9300

**COMMON NAME:** COMPOSITE PRIMER

CHEMICAL NAME: N.A.

**PRODUCT USE**: Light cured adhesive.

The following information is provided with regard to the toxicity and hazards of the pure components present in this product.

### SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

COMPONENT	C.A.S.	EXPOSURE LIMITS	LD50/LC50	%
2 Hydroxyethyl Methacrylate	868-77-9	N.E.	LD50=5888 mg/kg	50-60
			(oral rat)	
			LC50=N.E.	
Di-2- Methacryloyloxyethyl	41137-60-4	N.E.	N.E.	10-20
2,2,4-trimethylhexamethylene dicarbamate				

### **SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES**

**BOILING POINT:** 200°C N.E. **SPECIFIC GRAVITY:** N.E. N.E. VAPOR PRESSURE: MELTING POINT: **VAPOR DENSITY:** N.E. **EVAPORATION RATE:** N.E. SOLUBILITY IN WATER: N.E. N.E. ODOR THRESHOLD: COEFFICIENT OF OIL/WATER DISTRIBUTION: N.E. APPEARANCE AND ODOR: Clear liquid

## **SECTION 4 - FIRE AND EXPLOSION DATA**

FLASH POINT: 100-110 °C FLAMMABLE LIMITS: N.E.

**EXTINGUISHING MEDIA:** Alcohol foam, dry chemical, carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus with full protective equipment.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** When heated above the flashpoint: emits vapors, which when mixed with air, can burn or be explosive. Fine mists on sprays may be flammable at temperatures below the flash point. Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization. Vapors are heavier than air and may travel to ignition source.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide

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STABILITY: Stable Unstable Unstable POLYMERIZATION: Will Not Occur Will Occur

**CONDITIONS TO AVOID:** Heat and ignition sources.

INCOMPATIBILITY (MATERIALS TO AVOID): Reducing and oxidizing agents. Material has strong solvent properties and can soften

paint or rubber.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon monoxide, carbon dioxide.



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#### SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION

	YES	NO	NE	NA	NTP	IARC	OSHA	OTHER
MUTAGENIC AFFECTS			X					
TERATOGENIC AFFECTS			X					
REPRODUCTIVE TOXIN			X					
CARCINOGENICITY			X					
SENSITIZER		X						

ROUTES OF ENTRY: Inhalation  $\boxtimes$  Skin  $\boxtimes$  Ingestion  $\boxtimes$  HEALTH HAZARD (Acute And Chronic):

**INHALATION:** May cause nose and throat irritation. May cause nervous system depression. Reports have associated repeated and prolonged overexposure to brain damage and nervous system damage. May cause irritation or burning of mucous membranes.

**INGESTION**: May cause abnormal liver and kidney function

SKIN: May cause irritation or burning of skin. Repeated exposure may cause skin burns and allergic reactions.

**EYES:** May cause irritation or burning of eyes.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE**: Progressive steps of inhalation overexposure: headache, dizziness, nausea, staggering gait, confusion, unconsciousness.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.E.

**EMERGENCY FIRST AID PROCEDURES:** 

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

**INGESTION:** Do not induce vomiting. Give one or two glasses of water and seek medical attention.

**SKIN:** Wash with soap and water. Wash clothes prior to reuse.

**EYES:** Immediately flush eyes with water. Seek medical attention.

#### **SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE**

**IN CASE OF RELEASE OR SPILL:** Contain spill and keep out of sewers. Use absorbent to soak up liquid. **WASTE DISPOSAL METHOD:** Dispose of waste in accordance with local, state and federal regulations.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS: Keep away from heat, sparks, flame, direct sunlight and elevated temperatures.

## **SECTION 8 - CONTROL MEASURES**

**RESPIRATORY PROTECTION:** Reduce exposure in accordance with safe hygiene practice. If exposure limits are exceeded, use a MSHA-NIOSH approved respirator for organic vapors.

**PROTECTIVE GLOVES:** Disposable vinyl gloves.

**EYE PROTECTION:** Chemical eye goggles and full face protection if necessary.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Eye wash station. **WORK/HYGIENIC PRACTICE:** Follow routine safe hygiene practices.

### **SECTION 9 - PREPARATION INFORMATION**

This data is supplied to comply with OSHA Hazard Communication Standard 29 CFR 1910,1200 and W.H.M.I.S. CPR

**DATE:** <u>09 January 2006</u> **REVIEWED:** <u>03 April 2012</u>

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N.A. = NOT APPLICABLE N.E. = NOT ESTABLISHED

The information herein is given in good faith but no warranty expressed or implied is made.

NFPA

FIRE - 1 TOXICITY - 1

**REACTIVITY - 1** 

SPECIAL -



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Reviewed on 03/16/2015

### 1 Identification

- · Product identifier
- · Trade name: COMPOSITE PRIMER
- 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 Auxiliary for 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

Skin Irrit, 2 H315 Causes skin irritation.

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



GHS07

- · Signal word Warning
- · Hazard-determining components of labeling:

2-hydroxyethyl methacrylate (HEMA) urethane dimethacrylate (UDMA)

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#### · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

## Precautionary statements

Contaminated work clothing must not be allowed out of the workplace.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves.

Wear eye protection / face protection.

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

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

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



Health = 1 Fire = 0

Reactivity = 0

### · HMIS-ratings (scale 0 - 4)



Health = 1 Fire = 0

Reactivity = 0

- 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:	
868-77-9	2-hydroxyethyl methacrylate (HEMA)	50-70%
2455-24-5	tetrahydrofurfuryl methacrylate	10-20%
72869-86-4	urethane dimethacrylate (UDMA)	10-20%

#### 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; consult doctor in case of complaints.

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In case of unconsciousness place patient stably in side position for transportation.

· 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 Fire-fighting measures

- Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- 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.

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:

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.

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## 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Observe instructions for use.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Avoid contact with the eyes and skin.

- Information about protection against explosions and fires: No special measures required.
- · Storage:
- Requirements to be met by storerooms and receptacles:

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.

· 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 eves 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

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· Information on basic physical and	chemical properties
· General Information	• •
· Appearance:	
Form:	Liquid
Color:	Light yellow
· Odor: · Odor threshold:	Characteristic Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	Undetermined.
Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Insoluble.
Partition coefficient (n-octanol/wat	ter): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
	2.2.2/

## 10 Stability and reactivity

Organic solvents:
Other information

- · Reactivity No further relevant information available.
- · Chemical stability Stable at ambient temperature.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

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No further relevant information available.

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- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · 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: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:

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

Irritant

· Carcinogenic categories

#### · IARC (International Agency for Research on Cancer)

butylated hydroxytoluene (BHT)

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:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

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· **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.

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

UN-Number DOT, ADR, IMDG, IATA	UN3334
UN proper shipping name DOT, IMDG ADR IATA	Aviation regulated liquid, n.o.s. 3334 Aviation regulated liquid, n.o.s. Aviation regulated liquid, n.o.s. (2-hydroxyeth methacrylate (HEMA))
Transport hazard class(es)	
DOT, ADR, IMDG, IATA	
Class Label	<ul><li>9 Miscellaneous dangerous substances and articles</li><li>9</li></ul>
Packing group DOT, ADR, IMDG, IATA	III
Environmental hazards: Marine pollutant:	No
Special precautions for user	Warning: Miscellaneous dangerous substances a articles
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
Transport/Additional information:	
ADR Excepted quantities (EQ)	NOT SUBJECT TO ADR
IMDG Limited quantities (LQ) Excepted quantities (EQ)	- Code: -

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UN "Model Regulation":

UN3334, Aviation regulated liquid, n.o.s., 9, III

## 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):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

butylated hydroxytoluene (BHT)

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



GHS07

- · Signal word Warning
- · Hazard-determining components of labeling:

2-hydroxyethyl methacrylate (HEMA)

urethane dimethacrylate (UDMA)

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

· Precautionary statements

Contaminated work clothing must not be allowed out of the workplace.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves.

Wear eye protection / face protection.

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

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

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· 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 03/16/2015 / -

· 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

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

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.

#### · Disclaimer:

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