

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

071293984

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

071294016 71294016

## Safety Data Sheet according to HPR, Schedule 1

Printing date 01/23/2021

Version CA-EN-Rev 1

Reviewed on 01/23/2021

### 1 Identification

- **Product identifier**

- **Trade name:** G2-BOND Universal (1-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** Dental bonding material

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

- **Manufacturer/Supplier:**

GC America Inc.

3737 W. 127th Street

Alsip, IL 60803

USA

SDS.gcamerica@gc.dental

- **Information department:** Regulatory Affairs

- **Emergency telephone number:**

During normal opening times (Monday–Friday 8:00 AM–5:00 PM Central Time): +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

Skin Corrosion - Category 1A

Serious Eye Damage - Category 1

Skin Sensitizer - Category 1

Reproductive Toxicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 3

H225 Highly flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H360 May damage fertility or the unborn child.

H336 May cause drowsiness or dizziness.

- **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**

Exempt from classification and labeling – devices and drugs are not regulated according to WHMIS 2015.

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

- **Hazard pictograms**



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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 01/23/2021

Version CA-EN-Rev 1

Reviewed on 01/23/2021

**Trade name:** G2-BOND Universal (1-PRIMER)

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- **Signal word** Danger

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

acetone  
dimethacrylate component\*\*  
photoinitiator\*\*  
synergist\*\*

- **Hazard statements**

Highly flammable liquid and vapour.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
May damage fertility or the unborn child.  
May cause drowsiness or dizziness.

- **Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
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.  
Immediately call a poison center/doctor.  
IF exposed or concerned: Get medical advice/attention.  
Specific treatment (see on this label).  
Take off contaminated clothing and wash it before reuse.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**

34.5 % of the mixture consists of an ingredient or ingredients of unknown acute toxicity.

### 3 Composition/Information on ingredients

- **Chemical characterization: Mixtures**

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

- **Dangerous components:**

CAS: 67-64-1	acetone	15 – 40% w/w
	dimethacrylate**	7 – 13% w/w
	phosphoric acid ester monomer**	3 – 7% w/w
	dimethacrylate component**	1 – 5% w/w
	photoinitiator**	1 – 5% w/w
	synergist**	0.1 – 1% w/w

- **Additional information:**

Concentrations of dangerous components are expressed in percent by weight (% w/w).

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).

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# Safety Data Sheet

## according to HPR, Schedule 1

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Trade name: G2-BOND Universal (1-PRIMER)

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### 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.  
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.  
Call a doctor immediately.
- **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:**  
CO<sub>2</sub>, 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**  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
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.

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 01/23/2021

Version CA-EN-Rev 1

Reviewed on 01/23/2021

**Trade name:** G2-BOND Universal (1-PRIMER)

(Contd. of page 3)

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

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
 Avoid contact with the eyes and skin.  
 Ensure good ventilation/exhaustion at the workplace.  
 Observe instructions for use.  
 Prevent formation of aerosols.  
  
 Use caution when opening. The product is a highly flammable liquid and vapor; keep away from heat, hot surfaces, sparks, flames and other ignitions sources. Use with adequate ventilation. Do not ingest or breathe vapor. Personal Protective Equipment (PPE) such as gloves and safety eyewear are always to be worn. Check bottle with liquid before using. Make sure that upon removal of cap, the bottle opening has no obstructions. Some bottles may contain an insert (as a seal). The insert must be in the cap and not obstructing opening.  
 In case of contact, flush eyes with water for at least 15 minutes. Get prompt medical attention. If overcome by vapor, move to fresh air. If breathing is difficult, administer oxygen and seek medical attention. If swallowed, dilute by giving water to drink and seek medical attention. In case of contact with skin wash thoroughly with soap and water. Store securely. Store in a well ventilated place. Keep cool. Dispose of all waste according to local regulations.
- **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:**  
 Keep receptacle tightly sealed.  
 Store in cool, dry conditions in well sealed receptacles.  
 Observe instructions for use / storage.  
 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.

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 01/23/2021

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Reviewed on 01/23/2021

Trade name: G2-BOND Universal (1-PRIMER)

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- **Control parameters**

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

CAS: 67-64-1 acetone	
EL STEL: 500 ppm	
TWA: 250 ppm	
EV STEL: 750 ppm	
TWA: 500 ppm	

- **Regulatory information**

EL: OHS Guidelines Part 5, Table of Exposure Limits for Chemical and Biological Substances

EV: O. Reg. 287/17

- **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

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 01/23/2021

Version CA-EN-Rev 1

Reviewed on 01/23/2021

Trade name: G2-BOND Universal (1-PRIMER)

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### 9 Physical and chemical properties

#### · Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

Form:	Liquid
Color:	Yellow opaque
Refractive index:	1.4080 – 1.4110
Odor:	Characteristic
Odor threshold:	Not determined.

· pH-value at 20 °C: 1.5 – 2

##### · Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	55.8 – 56.6 °C

· Flash point: < -18 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: Undetermined.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not self-igniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

##### · Explosion limits:

Lower:	2.6 Vol %
Upper:	13 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: Soluble.

· Partition coefficient (n-octanol/water): Not determined.

##### · Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

##### · Solvent content:

Organic solvents:	33.0 %
Water:	23.7 %

Solids content: 9.7 %

· Other information: No further relevant information available.

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Trade name: G2-BOND Universal (1-PRIMER)

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### 10 Stability and reactivity

- **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.
- **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:**  
Carbon dioxide  
Carbon monoxide

### 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

CAS: 128-37-0 butylated hydroxytoluene

Oral	LD50	10700 mg/kg (guinea pig)
		1040 mg/kg (mouse)
		> 2930 mg/kg (rat (f+m))
		> 2000 mg/kg (rat (f+m))
Dermal	LD50	> 2000 mg/kg (rat (f+m))

- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.
- **Symptoms related to the physical, chemical and toxicological characteristics:** Allergic reactions
- **Subacute to chronic toxicity:** No further relevant information available.
- **Numerical measures of toxicity:**  
No ATEmix is calculated because ingredients of the mixture with LD50 or LC50 values are not considered relevant because of low concentration, a less severe acute toxicity category, or both. (ATEmix is the acute toxicity estimate of the mixture.)
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Corrosive

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

butylated hydroxytoluene

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.

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## according to HPR, Schedule 1

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**Trade name:** G2-BOND Universal (1-PRIMER)

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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.

- **Additional carcinogenic information:**

- **Repeated dose toxicity.** No further relevant information available.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Reproductive Toxicity - Category 1B

- **Germ cell mutagenicity** No further relevant information available.

- **Carcinogenicity** No further relevant information available.

- **Reproductive toxicity** No further relevant information available.

- **Specific target organ toxicity - single exposure** No further relevant information available.

- **Specific target organ toxicity - repeated exposure** No further relevant information available.

- **Aspiration hazard** No further relevant information available.

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

**CAS: 128-37-0 butylated hydroxytoluene**

NOEC-value Ecol. other effects	0.07 mg/l (daphnia magna) 21 day, reproductive effects
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- **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.

- **Ecotoxicological effects:**

- **Remark:** Harmful to fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German regulation, AwSV) (Self-assessment): slightly hazardous to water

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

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Harmful to aquatic organisms

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- **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:**

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

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 01/23/2021

Version CA-EN-Rev 1




Reviewed on 01/23/2021

Trade name: G2-BOND Universal (1-PRIMER)

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- |   |                            |
|---|----------------------------|
| · <b>UN-Number</b>  | UN1090                     |
| · <b>DOT/TDG, ADR, IMDG, IATA</b>   |                            |
| · <b>UN proper shipping name</b>  | Acetone solution           |
| · <b>DOT/TDG</b>  | 1090 ACETONE solution      |
| · <b>ADR</b>  | ACETONE solution           |
| · <b>IMDG, IATA</b>   |                            |
| · <b>Transport hazard class(es)</b>   |                            |
| · <b>DOT/TDG (Transport dangerous goods):</b>                                       |                            |
|    |                            |
| · <b>Class</b>  | 3 Flammable liquids        |
| · <b>Label</b>  | 3                          |
| · <b>ADR</b>  |                            |
|  |                            |
| · <b>Class</b>  | 3 (F1) Flammable liquids   |
| · <b>Label</b>  | 3                          |
| · <b>IMDG, IATA</b>   |                            |
|  |                            |
| · <b>Class</b>  | 3 Flammable liquids        |
| · <b>Label</b>  | 3                          |
| · <b>Packing group</b>  | II                         |
| · <b>DOT/TDG, ADR, IMDG, IATA</b>   |                            |
| · <b>Environmental hazards:</b>   | Not applicable.            |
| · <b>Special precautions for user</b>   | Warning: Flammable liquids |
| · <b>Hazard identification number (Kemler code):</b>                                | 33                         |
| · <b>EMS Number:</b>  | F-E, S-D                   |
| · <b>Stowage Category</b>   | E                          |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>    | Not applicable.            |

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 01/23/2021

Version CA-EN-Rev 1

Reviewed on 01/23/2021

Trade name: G2-BOND Universal (1-PRIMER)

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### · 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

#### · 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 1090 ACETONE SOLUTION, 3, II

## 15 Regulatory information

### · Safety, health and environmental regulations/legislation specific for the substance or mixture

#### · Canadian substance listings:

#### · Canadian Domestic Substances List (DSL)

acetone

water, distilled

dimethacrylate component\*\*

photoinitiator\*\*

photoinitiator\*\*

butylated hydroxytoluene

aluminum oxide

synergist\*\*

#### · 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).

#### · Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

#### · Canadian Ingredient Disclosure list (limit 1%)

acetone

dimethacrylate component\*\*

#### · GHS label elements

Exempt from classification and labeling – devices and drugs are not regulated according to WHMIS 2015.

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

#### · Hazard pictograms



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CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 01/23/2021

Version CA-EN-Rev 1

Reviewed on 01/23/2021

**Trade name:** G2-BOND Universal (1-PRIMER)

(Contd. of page 10)

- **Signal word** Danger
- **Hazard-determining components of labeling:**
  - acetone
  - dimethacrylate component\*\*
  - photoinitiator\*\*
  - synergist\*\*
- **Hazard statements**
  - Highly flammable liquid and vapour.
  - Causes severe skin burns and eye damage.
  - May cause an allergic skin reaction.
  - May damage fertility or the unborn child.
  - May cause drowsiness or dizziness.
- **Precautionary statements**
  - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - Do not breathe dust/fume/gas/mist/vapours/spray.
  - 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.
  - Immediately call a poison center/doctor.
  - IF exposed or concerned: Get medical advice/attention.
  - Specific treatment (see on this label).
  - Take off contaminated clothing and wash it before reuse.
  - 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@gc.dental
- **Date of the latest revision of the safety data sheet** 01/23/2021 / -
- **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)
  - TDG: Transportation of Dangerous Goods (Canada)
  - LEL: Lower Explosive Limit
  - UEL: Upper Explosive Limit
  - AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances that are hazardous to water) (Germany)
  - NOEC: No Observed Effect Concentration
  - ADR: Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG Code: International Maritime Dangerous Goods Code
  - DOT: Department of Transportation (USA)
  - IATA: International Air Transport Association
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 01/23/2021

Version CA-EN-Rev 1

Reviewed on 01/23/2021

**Trade name:** G2-BOND Universal (1-PRIMER)

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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>)
- PubChem (<https://pubchem.ncbi.nlm.nih.gov/>)
- ECHA (<http://echa.europa.eu/>)
- EnviChem ([www.echemportal.org](http://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.

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CA

# Safety Data Sheet

acc. to OSHA HCS 29 CFR 1910.1200

Printing date 01/23/2021

Version US-EN-Rev 1

Reviewed on 01/23/2021

## 1 Identification

- **Product identifier**

- **Trade name:** G2-BOND Universal (1-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** Dental bonding material

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

- **Manufacturer/Supplier:**

GC America Inc.

3737 W. 127th Street

Alsip, IL 60803

USA

SDS.gcamerica@gc.dental

- **Information department:** Regulatory Affairs

- **Emergency telephone number:**

During normal opening times (Monday–Friday 8:00 AM–5:00 PM Central Time): +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.

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

Eye Dam. 1 H318 Causes serious eye damage.

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

Repr. 1B H360 May damage fertility or the unborn child.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **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**

Exempt from labeling – medical devices and drugs do not require labeling according to HCS 2012.

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

- **Hazard pictograms**



- **Signal word** Danger

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US

# Safety Data Sheet

## acc. to OSHA HCS 29 CFR 1910.1200

Printing date 01/23/2021

Version US-EN-Rev 1

Reviewed on 01/23/2021

**Trade name:** G2-BOND Universal (1-PRIMER)

(Contd. of page 1)

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

acetone  
dimethacrylate component\*\*  
photoinitiator\*\*  
synergist\*\*

- **Hazard statements**

Highly flammable liquid and vapor.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
May damage fertility or the unborn child.  
May cause drowsiness or dizziness.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Do not breathe dusts or mists.  
Wear protective gloves/protective clothing/eye protection/face protection.  
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.  
Immediately call a poison center/doctor.  
If exposed or concerned: Get medical advice/attention.  
Specific treatment (see on this label).  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Hazard(s) not otherwise classified (HNOC):** None known.

- **Additional information:**

34.5 % of the mixture consists of component(s) of unknown toxicity.

- **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:**

CAS: 67-64-1	acetone	25 – < 50%
	dimethacrylate**	10 – < 25%
	phosphoric acid ester monomer**	5 – < 10%
	dimethacrylate component**	2.5 – < 5%
	photoinitiator**	1 – < 2.5%
	synergist**	0.2 – < 0.5%

- **Additional information:**

Concentrations of dangerous components are expressed in percent by weight (% w/w).

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).

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## 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.  
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.  
Call a doctor immediately.
- **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:**  
CO<sub>2</sub>, 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**  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
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.

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

· **Protective Action Criteria for Chemicals**

Protective Action Criterion (PAC); Protective Action Criteria (PACs); Lower Explosive Limit (LEL)

\* indicates the PAC value is between 10% and up to 50% of the LEL ( $10\% \text{ LEL} \leq \text{PAC} < 50\% \text{ LEL}$ ).

\*\* indicates the PAC value is between 50% and up to 100% of the LEL ( $50\% \text{ LEL} \leq \text{PAC} < 100\% \text{ LEL}$ ).

\*\*\* indicates the PAC value is at 100% or more of the LEL ( $\text{PAC} \geq \text{LEL}$ ).

excerpt from Introduction to PAC Table 2 – PAC Rev. 29 – May 2016

· **PAC-1:**

CAS: 67-64-1	acetone	200 ppm
	dimethacrylate component**	33 mg/m <sup>3</sup>
CAS: 1344-28-1	aluminum oxide	15 mg/m <sup>3</sup>

· **PAC-2:**

CAS: 67-64-1	acetone	3200* ppm
	dimethacrylate component**	360 mg/m <sup>3</sup>
CAS: 1344-28-1	aluminum oxide	170 mg/m <sup>3</sup>

· **PAC-3:**

CAS: 67-64-1	acetone	5700* ppm
	dimethacrylate component**	2,100 mg/m <sup>3</sup>
CAS: 1344-28-1	aluminum oxide	990 mg/m <sup>3</sup>

## 7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Avoid contact with the eyes and skin.  
 Ensure good ventilation/exhaustion at the workplace.  
 Observe instructions for use.  
 Prevent formation of aerosols.

Use caution when opening. The product is a highly flammable liquid and vapor; keep away from heat, hot surfaces, sparks, flames and other ignitions sources. Use with adequate ventilation. Do not ingest or breathe vapor. Personal Protective Equipment (PPE) such as gloves and safety eyewear are always to be worn. Check bottle with liquid before using. Make sure that upon removal of cap, the bottle opening has no obstructions. Some bottles may contain an insert (as a seal). The insert must be in the cap and not obstructing opening.

In case of contact, flush eyes with water for at least 15 minutes. Get prompt medical attention. If overcome by vapor, move to fresh air. If breathing is difficult, administer oxygen and seek medical attention. If swallowed, dilute by giving water to drink and seek medical attention. In case of contact with skin wash thoroughly with soap and water. Store securely. Store in a well ventilated place. Keep cool. Dispose of all waste according to local regulations.

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

Keep ignition sources away - Do not smoke.

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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:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Observe instructions for use / storage.

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 following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

CAS: 67-64-1 acetone	
PEL	Long-term value: 2400 mg/m <sup>3</sup> , 1000 ppm
REL	Long-term value: 590 mg/m <sup>3</sup> , 250 ppm
TLV	Short-term value: 1187 mg/m <sup>3</sup> , 500 ppm
	Long-term value: 594 mg/m <sup>3</sup> , 250 ppm
	BEI

- **Regulatory information**

PEL: Guide to Occupational Exposure Values (OSHA PELs)

REL: Guide to Occupational Exposure Values (NIOSH RELs)

TLV: Guide to Occupational Exposure Values (TLV)

- **Ingredients with biological limit values:**

CAS: 67-64-1 acetone	
BEI	50 mg/L
	Medium: urine
	Time: end of shift
	Parameter: Acetone (nonspecific)

- **Regulatory information** BEI: Guide to Occupational Exposure Values (BEI)

- **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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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:

Yellow opaque

· **Refractive index:**

1.4080 – 1.4110

· **Odor:**

Characteristic

· **Odor threshold:**

Not determined.

· **pH-value at 20 °C (68 °F):**

1.5 – 2

· **Change in condition**

Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

55.8 – 56.6 °C (132.4 – 133.9 °F)

· **Flash point:**

< -18 °C (< -0.4 °F)

· **Flammability (solid, gaseous):**

Not applicable.

· **Ignition temperature:**

Undetermined.

· **Decomposition temperature:**

Not determined.

· **Auto igniting:**

Product is not self-igniting.

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· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	2.6 Vol %
<b>Upper:</b>	13 Vol %
· <b>Vapor pressure:</b>	Not determined.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Soluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	33.0 %
<b>Water:</b>	23.7 %
<b>VOC content:</b>	0.00 %
<b>Solids content:</b>	9.7 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **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.
- **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:**  
Carbon dioxide  
Carbon monoxide

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

<b>CAS: 128-37-0 butylated hydroxytoluene</b>			
Oral	LD50	10700 mg/kg (guinea pig)	

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		1040 mg/kg (mouse)
		> 2930 mg/kg (rat (f+m))
Dermal	LD50	> 2000 mg/kg (rat (f+m))

· **Primary irritant effect:**

· **on the skin:** Strong caustic effect on skin and mucous membranes.

· **on the eye:**

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

· **Sensitization:** Sensitization possible through skin contact.

· **Symptoms related to the physical, chemical and toxicological characteristics:** Allergic reactions

· **Subacute to chronic toxicity:** No further relevant information available.

· **Numerical measures of toxicity:**

No ATEmix is calculated because ingredients of the mixture with LD50 or LC50 values are not considered relevant because of low concentration, a less severe acute toxicity category, or both. (ATEmix is the acute toxicity estimate of the mixture.)

· **Additional toxicological information:**

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

Corrosive

· **Carcinogenic categories**

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

butylated hydroxytoluene

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.

· **Additional carcinogenic information:**

· **Repeated dose toxicity.** No further relevant information available.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Repr. 1B

· **Germ cell mutagenicity** No further relevant information available.

· **Carcinogenicity** No further relevant information available.

· **Reproductive toxicity** No further relevant information available.

· **Specific target organ toxicity - single exposure** No further relevant information available.

· **Specific target organ toxicity - repeated exposure** No further relevant information available.

· **Aspiration hazard** No further relevant information available.

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## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

CAS: 128-37-0 butylated hydroxytoluene

NOEC-value Ecol. other effects	0.07 mg/l (daphnia magna) 21 day, reproductive effects
--------------------------------	---

- **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.

- **Ecotoxicological effects:**

- **Remark:** Harmful to fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German regulation, AwSV) (Self-assessment): slightly hazardous to water

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

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Harmful to aquatic organisms

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- **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:**

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

- **Uncleaned packagings:**

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

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- **UN-Number**

- **DOT, ADR, IMDG, IATA**

UN1090

- **UN proper shipping name**

- **DOT**

Acetone solution

- **ADR**

1090 ACETONE solution

- **IMDG, IATA**

ACETONE solution

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## · Transport hazard class(es)

## · DOT



## · Class

3 Flammable liquids

## · Label

3

## · ADR



## · Class

3 (F1) Flammable liquids

## · Label

3

## · IMDG, IATA



## · Class

3 Flammable liquids

## · Label

3

## · Packing group

## · DOT, ADR, IMDG, IATA

II

## · Environmental hazards:

Not applicable.

## · Special precautions for user

Warning: Flammable liquids

## · Hazard identification number (Kemler code):

33

## · EMS Number:

F-E,S-D

## · Stowage Category

E

## · 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

## · 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 1090 ACETONE SOLUTION, 3, II

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### 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):**

aluminum oxide

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

acetone	ACTIVE
water, distilled	ACTIVE
dimethacrylate**	ACTIVE
dimethacrylate component**	ACTIVE
photoinitiator**	ACTIVE
photoinitiator**	ACTIVE
butylated hydroxytoluene	ACTIVE
aluminum oxide	ACTIVE
synergist**	ACTIVE

- **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).

- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

acetone | I

- **EPA carcinogenic categories' legend:**

EPA weight-of-evidence (WoE): official codes and categories from EPA's 1986 guidelines and unofficial, derived codes from EPA's standard hazard descriptors from 1996, 1999, and 2005 guidelines  
 A: human carcinogen (1986)

B1: probable human carcinogen – based on limited evidence of carcinogenicity in humans (1986)

B2: probable human carcinogen – based on sufficient evidence of carcinogenicity in animals (1986)

C: possible human carcinogen (1986)

D: not classifiable as to human carcinogenicity (1986)

E: evidence of non-carcinogenicity for humans (1986)

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CaH: carcinogenic to humans  
 CBD: carcinogenic potential cannot be determined  
 I: data are inadequate for an assessment of human carcinogenic potential  
 II: inadequate information to assess carcinogenic potential  
 K/L: known/likely human carcinogen  
 L: likely to be carcinogenic to humans  
 NL: not likely to be carcinogenic to humans  
 S: suggestive evidence of carcinogenicity, but not sufficient to assess human carcinogenic potential  
 SC: suggestive evidence of carcinogenic potential

**· TLV (Threshold Limit Value)**

acetone	A4
butylated hydroxytoluene	A4
aluminum oxide	A4

**· ACGIH carcinogenic categories' legend:**

A1: confirmed human carcinogen  
 A2: suspected human carcinogen  
 A3: confirmed animal carcinogen with unknown relevance to humans  
 A4: not classifiable as a human carcinogen  
 A5: not suspected as a human carcinogen

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

None of the ingredients is listed.

**· GHS label elements**

Exempt from labeling – medical devices and drugs do not require labeling according to HCS 2012.  
 The product is classified and labeled according to the Globally Harmonized System (GHS).

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

acetone  
 dimethacrylate component\*\*  
 photoinitiator\*\*  
 synergist\*\*

**· Hazard statements**

Highly flammable liquid and vapor.  
 Causes severe skin burns and eye damage.  
 May cause an allergic skin reaction.  
 May damage fertility or the unborn child.  
 May cause drowsiness or dizziness.

**· Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Do not breathe dusts or mists.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 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.  
 Immediately call a poison center/doctor.  
 IF exposed or concerned: Get medical advice/attention.  
 Specific treatment (see on this label).

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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@gc.dental

**Date of preparation / last revision** 01/23/2021 / -

**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)

PAC: Protective Action Criterion (USA)

PACs: Protective Action Criteria (USA)

HNOC: Hazard Not Otherwise Classified (USA)

LEL: Lower Explosive Limit

UEL: Upper Explosive Limit

OSHA-Ca: Occupational Safety and Health Administration – Carcinogens or potential carcinogens regulated (USA)

NIOSH-Ca: National Institute for Occupational Safety and Health – Carcinogen List (USA)

NIOSH: National Institute for Occupational Safety and Health (USA)

TSCA: Toxic Substances Control Act (USA)

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances that are hazardous to water) (Germany)

NOEC: No Observed Effect Concentration

ADR: Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG Code: International Maritime Dangerous Goods Code

DOT: Department of Transportation (USA)

IATA: International Air Transport Association

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

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

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Index

Flam. Liq. 2: Flammable liquids – Category 2

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Repr. 1B: Reproductive toxicity – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

**Sources**

• Manufacturers' MSDSs/SDSs

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

 • PubChem (<https://pubchem.ncbi.nlm.nih.gov/>)

 • ECHA (<http://echa.europa.eu/>)

 • EnviChem ([www.echemportal.org](http://www.echemportal.org))

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**Notes:**

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