

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 02.08.2018





Version number 3

Revision: 22.06.2017

**SECTION 1: Identification**

- **1.1 Product identifier**
- **Trade name: GC Tray Adhesive**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Auxiliary for dental technology
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
GC EUROPE N.V.  
Interleuvenlaan 33  
B-3001 Leuven  
Tel. +32/(0)16/74.10.00  
Fax +32/(0)16/40.26.84  
msds@gc.dental
- **Information department:** Regulatory affairs
- **1.4 Emergency telephone number:** International: +01-813-248-0585 (ChemTel Inc.)

**SECTION 2: Hazard(s) identification**

- **2.1 Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**  
Exempt from requirements - product regulated as a medical device or an in vitro diagnostic medical device.
  - Flam. Liq. 2      H225    Highly flammable liquid and vapour.
  - Skin Irrit. 2      H315    Causes skin irritation.
  - Eye Dam. 1      H318    Causes serious eye damage.
  - Repr. 2          H361d   Suspected of damaging the unborn child.
  - STOT SE 3      H336    May cause drowsiness or dizziness.
  - STOT RE 2      H373    May cause damage to the central nervous system and the peripheral nervous system through prolonged or repeated exposure. Route of exposure: Inhalation.
  - Asp. Tox. 1      H304    May be fatal if swallowed and enters airways.
  - Aquatic Chronic 3    H412    Harmful to aquatic life with long lasting effects.
- 
- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**  
Exempt from requirements - product regulated as a medical device or an in vitro diagnostic medical device.  
The product is classified and labeled according to the CLP regulation.
  - **Hazard pictograms**
- |   |   |   |   |
|---|---|---|---|
|  |  |  |  |
| GHS02   | GHS05   | GHS07   | GHS08   |
- **Signal word** Danger
  - **Hazard-determining components of labeling:**  
toluene

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Salicylic acid

acetone

**· Hazard statements**

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H361d Suspected of damaging the unborn child.

H336 May cause drowsiness or dizziness.

H373 May cause damage to the central nervous system and the peripheral nervous system through prolonged or repeated exposure. Route of exposure: Inhalation.

H304 May be fatal if swallowed and enters airways.

H412 Harmful to aquatic life with long lasting effects.

**· Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves / eye protection / face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P331 Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· 2.3 Other hazards****· Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· 3.2 Chemical characterization: Mixtures****· Description:**

Only substances required to be mentioned according to Annex II of regulation 1907/2006 are listed. Information on the other substances that may be present can be obtained upon request.

**· Dangerous components:**

67-64-1	acetone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	25-<50%
108-88-3	toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	10-<25%

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78-93-3	butanone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	10-<25%
69-72-7	Salicylic acid Eye Dam. 1, H318; Acute Tox. 4, H302	≥3-<5%
1314-13-2	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	1-<2.5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

#### SECTION 4: First-aid measures

##### · 4.1 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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

Take affected persons into fresh air and keep quiet.

###### · **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Seek medical treatment.

If skin irritation continues, consult a doctor.

###### · **After eye contact:**

Protect unharmed eye.

Rinse opened eye for several minutes under running water.

If symptoms persist consult doctor.

Call a doctor immediately.

###### · **After swallowing:**

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

##### · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

##### · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

#### SECTION 5: Fire-fighting measures

##### · 5.1 Extinguishing media

· **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:** Water

##### · 5.2 Special hazards arising from the substance or mixture

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

##### · 5.3 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.

#### SECTION 6: Accidental release measures

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

Remove persons from danger area.

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*Keep away from ignition sources**Avoid contact with the eyes and skin.**Wear protective clothing.***· 6.2 Environmental precautions:***Do not allow product to reach sewage system or any water course.**Inform respective authorities in case of seepage into water course or sewage system.**Do not allow to penetrate the ground/soil.**In case of seepage into the ground inform responsible authorities.***· 6.3 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.***· 6.4 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.***SECTION 7: Handling and storage****· 7.1 Precautions for safe handling***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.***· 7.2 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.**Protect from heat and direct sunlight.**Store in a cool place.***· 7.3 Specific end use(s) No further relevant information available.****SECTION 8: Exposure controls/personal protection****· Additional information about design of technical systems: No further data; see item 7.****· 8.1 Control parameters****· Components with limit values that require monitoring at the workplace:****67-64-1 acetone**IOELV Long-term value: 1210 mg/m<sup>3</sup>, 500 ppm

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**108-88-3 toluene**

IOELV	Short-term value: 384 mg/m <sup>3</sup> , 100 ppm Long-term value: 192 mg/m <sup>3</sup> , 50 ppm Skin
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**78-93-3 butanone**

IOELV	Short-term value: 900 mg/m <sup>3</sup> , 300 ppm Long-term value: 600 mg/m <sup>3</sup> , 200 ppm
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· **Additional information:** The lists that were valid during the creation were used as basis.

· **8.2 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:**



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

**Form:** Fluid

**Color:** Blue

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

**Melting point/Melting range:** Undetermined.

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<b>Boiling point/Boiling range:</b>	55 °C
· <b>Flash point:</b>	-17 °C
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	Undetermined.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	1.8 Vol %
<b>Upper:</b>	13 Vol %
· <b>Vapor pressure:</b>	Not determined.
· <b>Density at 20 °C:</b>	0.7615 g/cm <sup>3</sup>
· <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>	Insoluble.
· <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>	52.5 %
<b>VOC (EC)</b>	399.9 g/l
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.

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

**67-64-1 acetone**

Oral	LD50	5,800 mg/kg (rat (f+m))
Dermal	LD50	20,000 mg/kg (rabbit)

**78-93-3 butanone**

Oral	LD50	3,300 mg/kg (rat (f+m))
Dermal	LD50	5,000 mg/kg (rabbit)

· **Primary irritant effect:**

· **on the skin:**

Causes skin irritation.

· **on the eye:**

Causes serious eye damage.

· **Sensitization:** Based on available data, the classification criteria are not met.

· **Additional toxicological information:**

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Repeated dose toxicity** May cause damage to organs through prolonged or repeated exposure.

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

No further relevant information available.

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity**

Suspected of damaging the unborn child.

· **STOT-single exposure**

May cause drowsiness or dizziness.

· **STOT-repeated exposure**

May cause damage to the central nervous system and the peripheral nervous system through prolonged or repeated exposure. Route of exposure: Inhalation.

· **Aspiration hazard**

May be fatal if swallowed and enters airways.

**SECTION 12: Ecological information**

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:** Harmful to fish

· **Additional ecological information:**

· **General notes:**

Harmful to aquatic organisms

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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· 12.6 Other adverse effects No further relevant information available.

### SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

18 00 00	WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)
18 01 00	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 06*	chemicals consisting of or containing hazardous substances

· Uncleaned packagings:

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

### SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA

UN1993

· 14.2 UN proper shipping name

· DOT

· ADR

Flammable liquids, n.o.s. (Acetone, Ethyl methyl ketone)

1993 FLAMMABLE LIQUID, N.O.S. (ACETONE, ETHYL METHYL KETONE (METHYL ETHYL KETONE)), special provision 640D

· IMDG, IATA

FLAMMABLE LIQUID, N.O.S. (ACETONE, ETHYL METHYL KETONE (METHYL ETHYL KETONE))

· 14.3 Transport hazard class(es)

· ADR



· Class

3 (F1) Flammable liquids

· Label

3

· IMDG, IATA



· Class

3 Flammable liquids

· Label

3

· 14.4 Packing group

· ADR, IMDG, IATA

II

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## · 14.5 Environmental hazards:

· Marine pollutant: No

## · 14.6 Special precautions for user

Warning: Flammable liquids

· Danger code (Kemler):

33

· EMS Number:

F-E,S-E

· Stowage Category

B

## · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

## · Transport/Additional information:

## · ADR

· 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

· Transport category

2

· Tunnel restriction code

D/E

## · 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 1993 FLAMMABLE LIQUID, N.O.S., SPECIAL PROVISION 640D (ACETONE, ETHYL METHYL KETONE (METHYL ETHYL KETONE)), 3, II

## \* SECTION 15: Regulatory information

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

· Sara

## · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

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

108-88-3 toluene

78-93-3 butanone

1314-13-2 zinc oxide

## · 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.

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· <b>Chemicals known to cause developmental toxicity:</b>	
108-88-3	toluene

· <b>Carcinogenic categories</b>		
· <b>EPA (Environmental Protection Agency)</b>		
67-64-1	acetone	I
108-88-3	toluene	II
78-93-3	butanone	I
1314-13-2	zinc oxide	D, I, II

· <b>TLV (Threshold Limit Value established by ACGIH)</b>		
67-64-1	acetone	A4
108-88-3	toluene	A4

· <b>MAK (German Maximum Workplace Concentration)</b>	
None of the ingredients is listed.	

· <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>	
None of the ingredients is listed.	

- **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

- **Seveso category P5c** FLAMMABLE LIQUIDS

- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t

- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t

- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 48

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

## SECTION 16: Other information

- **Relevant phrases**

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

H373 May cause damage to the central nervous system and the peripheral nervous system through prolonged or repeated exposure. Route of exposure: Inhalation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

- **Classification according to Regulation (EC) No 1272/2008** Calculation method

- **Department issuing SDS:** Regulatory affairs

- **Contact:** msds@gc.dental

- **Abbreviations and acronyms:**

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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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ACGIH: American Conference of Governmental Industrial Hygienists  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 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  
 NIOSH: National Institute for Occupational Safety  
 OSHA: Occupational Safety & Health  
 Flam. Liq. 2: Flammable liquids – Category 2  
 Acute Tox. 4: Acute toxicity – Category 4  
 Skin Irrit. 2: Skin corrosion/irritation – Category 2  
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
 Repr. 2: Reproductive toxicity – Category 2  
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2  
 Asp. Tox. 1: Aspiration hazard – Category 1  
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1  
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

• **Sources**

- ECHA (<http://echa.europa.eu/>)
- EnviChem ([www.echemportal.org](http://www.echemportal.org))

• **\* Data compared to the previous version altered.**

*This version replaces all previous versions.*

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