

## Safety Data Sheet in accordance with HSNO

Printing date 19.06.2020


Version number 1

Revision: 19.06.2020

### 1 Identification of the substance or mixture and of the supplier

- **Product identifier**
- **Trade name:** *GC G-aenial A'CHORD*
- **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
- **Details of the supplier of the safety data sheet**  
Henry Schein Dental  
23 William Pickering Drive, Albany  
Auckland 0632, NEW ZEALAND  
  
PO Box 101140, NSMC  
Auckland 0745, NEW ZEALAND  
  
Free Phone: 0800 808 855
- **Further information obtainable from:** Regulatory affairs
- **Emergency telephone number:** 0800 764 766 (National Poisons Centre)

### 2 Hazards identification

- **Classification of the substance or mixture**  
Acute Tox. 5      H333 May be harmful if inhaled.  
Skin Corr. 3      H316 Causes mild skin irritation.  
Skin Sens. 1      H317 May cause an allergic skin reaction.  
Aquatic Acute 3    H402 Harmful to aquatic life.  
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **Label elements**
- **GHS label elements**  
Exempt from requirements - product regulated as a medical device or an in vitro diagnostic medical device.  
The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Exemptions**  
The product, regulated as an invasive medical device by the Regulation (EC) 2017/745, is exempted from labelling requirements for substances and mixtures (according to the provision of the Art 1.5).
- **Hazard pictograms**  
  
GHS07
- **Signal word** Warning
- **Hazard-determining components of labelling:**  
Urethane Dimethacrylate (UDMA)  
6-tert-butyl-2,4-xylenol  
2,2'-ethylenedioxydiethyl dimethacrylate  
(octahydro-4,7-methano-1H-indenediyl)bis(methylene) bismethacrylate

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**· Hazard statements**

May be harmful if inhaled.  
Causes mild skin irritation.  
May cause an allergic skin reaction.  
Harmful to aquatic life with long lasting effects.

**· Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.  
Contaminated work clothing should not be allowed out of the workplace.  
Avoid release to the environment.  
Wear protective gloves.  
IF INHALED: Call a POISON CENTER/doctor if you feel unwell.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

**· Other hazards****· Results of PBT and vPvB assessment**

· **PBT:** Not applicable.  
· **vPvB:** Not applicable.

### 3 Composition/Information on ingredients

**· Chemical characterisation: 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:**

CAS: 41637-38-1	Esterification products of 4,4'-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid. Aquatic Chronic 4, H413	10-<25%
CAS: 72869-86-4 EINECS: 276-957-5	Urethane Dimethacrylate (UDMA) Skin Sens. 1, H317	2.5-<5%
CAS: 109-16-0 EINECS: 203-652-6	2,2'-ethylenedioxydiethyl dimethacrylate Skin Sens. 1, H317	2.5-<5%
CAS: 1985-51-9 EINECS: 217-856-8	2,2-dimethyl-1,3-propanediyl bismethacrylate Skin Irrit. 2, H315; Eye Irrit. 2A, H319	1-<2.5%
CAS: 43048-08-4 EINECS: 256-062-6	(octahydro-4,7-methano-1H-indenediyl)bis(methylene) bismethacrylate Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	1-<2.5%
CAS: 1309-37-1 EINECS: 215-168-2	Iron(III)oxide	1-<2.5%
CAS: 5870-38-2 EINECS: 227-522-3	Diethyl 2,5-dihydroxyterephthalate Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	1-<2.5%
CAS: 13463-67-7 EINECS: 236-675-5	titanium dioxide	1-<2.5%
CAS: 128-37-0 EINECS: 204-881-4	Butylated hydroxytoluene Aquatic Acute 1, H400; Aquatic Chronic 1, H410	≥0.25-<0.5%
CAS: 1879-09-0 EINECS: 217-533-1	6-tert-butyl-2,4-xylenol Acute Tox. 2, H310; Acute Tox. 3, H331; STOT RE 2, H373; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Aquatic Acute 2, H401	0.1-<0.2%

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CAS: 75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	(Contd. of page 2)
EINECS: 278-355-8	Repr. 2, H361	0.1-<0.2%

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

### 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. 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:**  
Rinse opened eye for several minutes under running water. If symptoms persist, 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:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.
- **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.  
No further relevant information available.
- **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 formation of dust.  
Avoid contact with the eyes and skin.  
Wear protective clothing.

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- **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:**  
Pick up mechanically.  
Prevent formation of dust.  
Dispose of the material collected 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**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of dust.  
Any unavoidable deposit of dust must be regularly removed.  
Avoid contact with the eyes and skin.
- **Information about fire - and explosion protection:** Dust can combine with air to form an explosive mixture.
- **Conditions for safe storage, including any incompatibilities**
- **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:** None.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

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

<b>1309-37-1 Iron(III)oxide</b>		
WES (New Zealand)	Long-term value: 5 mg/m <sup>3</sup> as Fe	
<b>13463-67-7 titanium dioxide</b>		
WES (New Zealand)	Long-term value: 10 mg/m <sup>3</sup>	
<b>128-37-0 Butylated hydroxytoluene</b>		
TWA (New Zealand)	Long-term value: 10 mg/m <sup>3</sup>	
WES (New Zealand)	Long-term value: 10 mg/m <sup>3</sup>	
· <b>DNELs</b>		
<b>13463-67-7 titanium dioxide</b>		
Inhalative	DNEL inhalation	10 mg/m <sup>3</sup> (man)
<b>128-37-0 Butylated hydroxytoluene</b>		
Dermal	DNEL dermal	0.5 mg/kg bw/day (man)

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Inhalative	DNEL inhalation	3.5 mg/m <sup>3</sup> (man)
<b>1879-09-0 6-tert-butyl-2,4-xylenol</b>		
Inhalative	DNEL inhalation	0.14 mg/m <sup>3</sup> (man)

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Do not inhale dust / smoke / mist.

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

· **Respiratory protection:** 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

### 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

<b>Form:</b>	Pasty
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Odourless
<b>Odour threshold:</b>	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	Undetermined.

· **Flash point:** Not applicable.

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· <b>Flammability (solid, gas):</b>	Not determined.
· <b>Ignition temperature:</b>	Undetermined.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	Not determined.
Upper:	Not determined.
· <b>Vapour pressure:</b>	Not applicable.
· <b>Density:</b>	Not determined. 2,56 g/cm <sup>3</sup> 1,18g/ml
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with water:</b>	Insoluble.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **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:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**

· <b>LD/LC50 values relevant for classification:</b>		
<b>72869-86-4 Urethane Dimethacrylate (UDMA)</b>		
Oral	LD50	>5,000 mg/kg (rat female) (OECD 401)
<b>1309-37-1 Iron(III)oxide</b>		
Oral	LD50	>5,000 mg/kg (rat (f+m))

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**13463-67-7 titanium dioxide**

Oral LD50 &gt;5,000 mg/kg (mouse) (OECD 420)

Inhalative LC50/4 h &gt;6.82 mg/l (rat male)

**128-37-0 Butylated hydroxytoluene**

Oral LD50 &gt;6,000 mg/kg (rat (f+m)) (OECD 401)

**1879-09-0 6-tert-butyl-2,4-xylenol**

Oral LD50 910 mg/kg (rat (f+m)) (OECD 401)

Dermal LD50 &lt;200 mg/kg (rabbit) (OECD 402)

- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** Sensitisation possible through skin contact.
- **Repeated dose toxicity** No further relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
No further relevant information available.

**12 Ecological information**· **Toxicity**· **Aquatic toxicity:****72869-86-4 Urethane Dimethacrylate (UDMA)**

EC50/48h (static) &gt;1.2 mg/l (daphnia magna) (OECD 202)

**128-37-0 Butylated hydroxytoluene**

EC50/48h (static) 0.48 mg/l (daphnia magna) (OECD 202)

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
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.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

**13 Disposal considerations**· **Waste treatment methods**· **Recommendation**

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

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

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### 14 Transport information

· UN-Number	
· ADR, IMDG, IATA	not regulated
· UN proper shipping name	
· ADR, IMDG, IATA	not regulated
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	not regulated
· Packing group	
· ADR, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	not regulated

### 15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture	
· New Zealand Inventory of Chemicals	
65997-17-3	Glass, oxide, chemicals
41637-38-1	Esterification products of 4,4'-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid.
2530-85-0	3-trimethoxysilylpropyl methacrylate
72869-86-4	Urethane Dimethacrylate (UDMA)
109-16-0	2,2'-ethylenedioxydiethyl dimethacrylate
1985-51-9	2,2-dimethyl-1,3-propanediyl bismethacrylate
43048-08-4	(octahydro-4,7-methano-1H-indenediyl)bis(methylene) bismethacrylate
1309-37-1	Iron(III)oxide
1317-61-9	triiron tetraoxide
13463-67-7	titanium dioxide
20344-49-4	Iron hydroxide oxide
	Silane, dichlorodimethyl-, reaction products with silica
60676-86-0	Silica, vitreous
128-37-0	Butylated hydroxytoluene
1879-09-0	6-tert-butyl-2,4-xilenol
6197-30-4	octocrilene
10287-53-3	ethyl 4-dimethylaminobenzoate
10373-78-1	Camphorquinone
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide
78-67-1	2,2'-dimethyl-2,2'-azodipropionitrile

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· <b>HSNO Approval numbers</b>		
41637-38-1	Esterification products of 4,4'-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid.	HSR007296
109-16-0	2,2'-ethylenedioxydiethyl dimethacrylate	HSR003763
128-37-0	Butylated hydroxytoluene	HSR002784
1879-09-0	6-tert-butyl-2,4-xylenol	HSR003625

- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
Urethane Dimethacrylate (UDMA)  
6-tert-butyl-2,4-xylenol  
2,2'-ethylenedioxydiethyl dimethacrylate  
(octahydro-4,7-methano-1H-indenediyl)bis(methylene) bismethacrylate
- **Hazard statements**  
May be harmful if inhaled.  
Causes mild skin irritation.  
May cause an allergic skin reaction.  
Harmful to aquatic life with long lasting effects.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Contaminated work clothing should not be allowed out of the workplace.  
Avoid release to the environment.  
Wear protective gloves.  
IF INHALED: Call a POISON CENTER/doctor if you feel unwell.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

- **Relevant phrases**  
H302 Harmful if swallowed.  
H310 Fatal in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H331 Toxic if inhaled.  
H335 May cause respiratory irritation.  
H361 Suspected of damaging fertility or the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.

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H401 Toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H411 Toxic to aquatic life with long lasting effects.  
 H413 May cause long lasting harmful effects to aquatic life.

· **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

IATA: International Air Transport Association

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)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - oral – Category 4

Acute Tox. 2: Acute toxicity - dermal – Category 2

Acute Tox. 3: Acute toxicity - inhalation – Category 3

Acute Tox. 5: Acute toxicity - inhalation – Category 5

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Skin Corr. 3: Skin corrosion/irritation – Category 3

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

Skin Sens. 1: Skin sensitisation – Category 1

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

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

· **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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