

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

Printing date 09.04.2021

Version number 1

Revision: 09.04.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name: GC Initial IQ-SQIN****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** Auxillary 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

Further information obtainable from: Regulatory affairs**1.4 Emergency telephone number:**

National poison center for United Kingdom of Great Britain and Northern Ireland:

Belfast: +44 28 90 63 2032

Birmingham: +44 121 507 4123

Edinburgh: +44 131 242 1383

Newcastle Upon Tyne: +44 191 2606182/+44 191 2606180

Penarth: +44 292 071 55 54

SECTION 2: Hazards 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.

Eye Dam. 1 H318 Causes serious eye damage.

Repr. 1B H360FD May damage fertility. May damage the unborn child.

STOT RE 1 H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure:
Inhalation.**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

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

GHS05 GHS08

Signal word Danger

(Contd. on page 2)

GB

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

Printing date 09.04.2021

Version number 1

Revision: 09.04.2021

Trade name: GC Initial IQ-SQIN

(Contd. of page 1)

· Hazard-determining components of labelling:

Cristobalite
calcium oxide
diboron trioxide

· Hazard statements

H318 Causes serious eye damage.
H360FD May damage fertility. May damage the unborn child.
H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

· Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P308+P313 IF exposed or concerned: Get medical advice/attention.
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 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: 14464-46-1 EINECS: 238-455-4	Cristobalite STOT RE 1, H372	50-<75%
CAS: 1344-28-1 EINECS: 215-691-6	aluminium oxide substance with a Community workplace exposure limit	10-<25%
CAS: 1303-86-2 EINECS: 215-125-8 Index number: 005-008-00-8	diboron trioxide Repr. 1B, H360FD	5-<10%
CAS: 1305-78-8 EINECS: 215-138-9	calcium oxide Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335	≥3-<5%
CAS: 1304-28-5 EINECS: 215-127-9 Index number: 056-002-00-7	barium oxide, obtained by calcining witherite Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	2.5-<5%
CAS: 1314-23-4 EINECS: 215-227-2	zirconium oxide substance with a Community workplace exposure limit	0.5-<1%
CAS: 1314-56-3 EINECS: 215-236-1 Index number: 015-010-00-0	phosphorus pentoxide Skin Corr. 1A, H314	0.5-<1%

(Contd. on page 3)

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

Printing date 09.04.2021

Version number 1

Revision: 09.04.2021

Trade name: GC Initial IQ-SQIN

(Contd. of page 2)

CAS: 7758-88-5 EINECS: 231-841-3	cerium trifluoride substance with a Community workplace exposure limit	0,5-<1%
CAS: 13463-67-7 EINECS: 236-675-5	titanium dioxide substance with a Community workplace exposure limit	0,5-<1%

· **SVHC**

1303-86-2 diboron trioxide

· **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: Firefighting measures· **5.1 Extinguishing media**· **Suitable extinguishing agents:**CO₂, 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· **5.2 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.

· **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.

GB

(Contd. on page 4)

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

Printing date 09.04.2021

Version number 1

Revision: 09.04.2021

Trade name: GC Initial IQ-SQIN

(Contd. of page 3)

SECTION 6: Accidental release measures

· **6.1 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.

· **6.2 Environmental precautions:**

Do not allow product to reach sewage system or any water course.
Do not allow to penetrate the ground/soil.

· **6.3 Methods and material for containment and cleaning up:**

Pick up mechanically.
Prevent formation of dust.
Dispose of the material collected 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**

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.

· **7.2 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.

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

· **8.1 Control parameters**

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

14464-46-1 Cristobalite

WEL	Long-term value: 0.1 * mg/m ³ *respirable dust
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1344-28-1 aluminium oxide

WEL	Long-term value: 10 * 4 ** mg/m ³ *inhalable dust **respirable dust
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1303-86-2 diboron trioxide

WEL	Short-term value: 20 mg/m ³ Long-term value: 10 mg/m ³
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(Contd. on page 5)

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

Printing date 09.04.2021

Version number 1

Revision: 09.04.2021

Trade name: GC Initial IQ-SQIN

(Contd. of page 4)

1305-78-8 calcium oxide

WEL Short-term value: 4* mg/m³
Long-term value: 2 1* mg/m³
*respirable fraction

1304-28-5 barium oxide, obtained by calcining witherite

WEL Long-term value: 0.5 mg/m³
as Ba

1314-23-4 zirconium oxide

WEL Short-term value: 10 mg/m³
Long-term value: 5 mg/m³
as Zr

1314-56-3 phosphorus pentoxide

WEL Short-term value: 2 mg/m³
Long-term value: 1 mg/m³

7758-88-5 cerium trifluoride

WEL Long-term value: 2.5 mg/m³
as F

13463-67-7 titanium dioxide

WEL Long-term value: 10* 4** mg/m³
*total inhalable **respirable

· DNELs**13463-67-7 titanium dioxide**

Inhalative	DNEL inhalation	10 mg/m ³ (man)
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· **Additional information:** The lists valid during the making were used as basis.

· 8.2 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.

(Contd. on page 6)

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

Printing date 09.04.2021

Version number 1

Revision: 09.04.2021

Trade name: GC Initial IQ-SQIN

(Contd. of page 5)

· Eye protection:



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	Solid
· Colour:	According to product specification
· Odour:	Characteristic
· Odour threshold:	Not determined.

· pH-value:	Not applicable.
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· Change in condition

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	Undetermined.

· Flash point:	Not applicable.
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· Flammability (solid, gas):	Not determined.
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· Ignition temperature:	Undetermined.
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· Decomposition temperature:	Not determined.
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· Auto-ignition temperature:	Product is not selfigniting.
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· Explosive properties:	Product does not present an explosion hazard.
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· Explosion limits:

· Lower:	Not determined.
· Upper:	Not determined.

· Vapour pressure:	Not applicable.
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· Density at 20 °C:	2.33 g/cm ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.

· Solubility in / Miscibility with water:	Fully miscible.
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· Partition coefficient: n-octanol/water:	Not determined.
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· Viscosity:

· Dynamic:	Not applicable.
· Kinematic:	Not applicable.

· 9.2 Other information	No further relevant information available.
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GB

(Contd. on page 7)

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

Printing date 09.04.2021

Version number 1

Revision: 09.04.2021

Trade name: GC Initial IQ-SQIN

(Contd. of page 6)

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.

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

13463-67-7 titanium dioxide

Oral	LD50	>5,000 mg/kg (mouse) (OECD 420)
Inhalative	LC50/4 h	>6.82 mg/l (rat male)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Repeated dose toxicity** No further relevant information available.
- **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**
May damage fertility. May damage the unborn child.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**
Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

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.
- **Additional ecological information:**
- **General notes:** Not hazardous for water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 8)

GB

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

Printing date 09.04.2021

Version number 1

Revision: 09.04.2021

Trade name: GC Initial IQ-SQIN

(Contd. of page 7)

· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 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.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA

UN1759

· 14.2 UN proper shipping name

· ADR

1759 CORROSIVE SOLID, N.O.S. (POTASSIUM MONOXIDE, cerium trifluoride)

· IMDG, IATA

CORROSIVE SOLID, N.O.S. (POTASSIUM MONOXIDE)

· 14.3 Transport hazard class(es)

· ADR



· Class

8 (C10) Corrosive substances.

· Label

8

· IMDG, IATA



· Class

8 Corrosive substances.

· Label

8

· 14.4 Packing group

· ADR, IMDG, IATA

II

· 14.5 Environmental hazards:

· Marine pollutant:

No

· 14.6 Special precautions for user

Warning: Corrosive substances.

· Hazard identification number (Kemler code):

80

· EMS Number:

F-A,S-B

· Stowage Category

A

· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

(Contd. on page 9)

GB

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

Printing date 09.04.2021

Version number 1

Revision: 09.04.2021

Trade name: GC Initial IQ-SQIN

(Contd. of page 8)

· **Transport/Additional information:**· **ADR**· **Limited quantities (LQ)**

1 kg

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· **Transport category**

2

· **Tunnel restriction code**

E

· **IMDG**· **Limited quantities (LQ)**

1 kg

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· **UN "Model Regulation":**

UN 1759 CORROSIVE SOLID, N.O.S. (POTASSIUM MONOXIDE, CERIUM TRIFLUORIDE), 8, II

SECTION 15: Regulatory information· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Directive 2012/18/EU**· **Named dangerous substances - ANNEX I** None of the ingredients is listed.· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 30· **Other regulations, limitations and prohibitive regulations**· **Substances of very high concern (SVHC) according to REACH, Article 57**

1303-86-2 diboron trioxide

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**· **Relevant phrases**

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H360FD May damage fertility. May damage the unborn child.

H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

· **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

IATA: International Air Transport Association

(Contd. on page 10)

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

Printing date 09.04.2021

Version number 1

Revision: 09.04.2021

Trade name: GC Initial IQ-SQIN

(Contd. of page 9)

GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 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
 SVHC: Substances of Very High Concern
 vPvB: very Persistent and very Bioaccumulative
 Acute Tox. 4: Acute toxicity - oral – Category 4
 Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 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. 1B: Reproductive toxicity – Category 1B
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

· **Sources**

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

· * **Data compared to the previous version altered.**

This version replaces all previous versions.

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