1 Identification

· Product identifier
  · Trade name: GC Fuji VII Liquid

· 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
  · 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@gceurope.com

· Information department: Regulatory affairs

2 Hazard(s) identification

· Classification of the substance or mixture
  Skin Corr. 1A  H314  Causes severe skin burns and eye damage.
  Eye Dam. 1  H318  Causes serious eye damage.

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

· Hazard pictograms

  GHS05

· Signal word
  Danger

· Hazard-determining components of labeling:
  Tartaric acid

· Hazard statements
  Causes severe skin burns and eye damage.

· Precautionary statements
  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/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.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
Safety Data Sheet
acc. to OSHA HCS 29 CFR 1910.1200

Printing date 10/11/2014 Reviewed on 09/27/2014
Version 1

Trade name: GC Fuji VII Liquid

- Classification system:
- NFPA ratings (scale 0 - 4)
  Health = 4
  Fire = 0
  Reactivity = 0

- HMIS-ratings (scale 0 - 4)

- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description:
  A glassy inorganic solid in powdered form. The porcelain is formed by melting together a mixture of inorganic oxides in various proportions. Colouration is achieved by the addition of various inorganic pigments.

- Dangerous components:
  - CAS: 87-69-4
  - EINECS: 201-766-0
  - Tartaric acid 10-20%

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.
- Most important symptoms and effects, both acute and delayed
  No further relevant information available.

(Contd. on page 3)
5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.
  - For safety reasons unsuitable extinguishing agents: Water with full jet
  - Special hazards arising from the substance or mixture: Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
  - Protective equipment: Wear self-contained respiratory protective device.
- Additional information
  - Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Remove persons from danger area.
  - Avoid contact with the eyes and skin.
  - Wear protective clothing.
- Environmental precautions:
  - Do not allow product to reach sewage system or any water course.
  - Do not allow to penetrate the ground/soil.
- Methods and material for containment and cleaning up:
  - 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

- Precautions for safe handling
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.
  - Avoid contact with the eyes and skin.
- Information about protection against explosions and fires: No special measures required.
- 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: Keep receptacle tightly sealed.
8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters
  - Components with limit values that require monitoring at the workplace:
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      The usual precautionary measures for handling chemicals should be followed.
      Avoid contact with the 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
      - Eye protection:
        - Tightly sealed goggles
### 3. Change in condition
- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** 100 °C (212 °F)

### 4. Flash point:
- Not applicable.

### 5. Flammability (solid, gaseous):
- Not applicable.

### 6. Ignition temperature:
- Undetermined.

### 7. Decomposition temperature:
- Not determined.

### 8. Auto igniting:
- Product is not selfigniting.

### 9. Danger of explosion:
- Product does not present an explosion hazard.

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<th>· Explosion limits:</th>
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<tr>
<td>Lower: Not determined.</td>
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<td>Upper: Not determined.</td>
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### 10. Vapor pressure:
- Not determined.

### 11. Density:
- Not determined.
- **Relative density:** Not determined.
- **Vapour density:** Not determined.
- **Evaporation rate:** Not determined.

### 12. Solubility in / Miscibility with Water:
- Insoluble.

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

### 14. Viscosity:
- **Dynamic:** Not determined.
- **Kinematic:** Not determined.

### 15. Other information:
- 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:**
- **LD/LC50 values that are relevant for classification:** No further relevant information available.
- **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:** No sensitizing effects known.

- **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)**
    - 9003-01-4 Polyacrylic acid 3

  - **NTP (National Toxicology Program)**
    - None of the ingredients is listed.

  - **OSHA-Ca (Occupational Safety & Health Administration)**
    - None of the ingredients is listed.

### 12 Ecological information

- **Toxicity**
  - **Aquatic toxicity:** No further relevant information available.
  - **Persistence and degradability** No further relevant information available.
  - **Bioaccumulative potential** No further relevant information available.
  - **Mobility in soil** No further relevant information available.

- **Additional ecological information:**
  - **General notes:***
    Water hazard class 1 (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    Must not reach bodies of water or drainage ditch undiluted or unneutralized.
    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:**
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

### 14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA**  UN3265
**Trade name:** GC Fuji VII Liquid

- **UN proper shipping name**
  - Corrosive liquid, acidic, organic, n.o.s. (Polyacrylic acid, Tartaric acid)

- **DOT**
  - Class 8 Corrosive substances
  - Label 8

- **ADR**
  - Class 8 (C3) Corrosive substances
  - Label 8

- **IMDG, IATA**
  - Class 8 Corrosive substances
  - Label 8

- **Packing group**
  - DOT, ADR, IMDG, IATA II

- **Environmental hazards:**
  - Marine pollutant: No

- **Special precautions for user**
  - Danger code (Kemler): 80
  - EMS Number: F-A,S-B
  - Segregation groups: Acids

- **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
Trade name: GC Fuji VII Liquid

- IMDG
- Limited quantities (LQ): 1L
- Excepted quantities (EQ): Code: E2
  Minimum net quantity per inner packaging: 30 ml
  Maximum net quantity per outer packaging: 500 ml

- UN "Model Regulation": UN3265, Corrosive liquid, acidic, organic, n.o.s. (Polyacrylic acid, Tartaric acid), 8, II

15 Regulatory information

- 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):
      None of the ingredients is listed.
    - TSCA (Toxic Substances Control Act):
      All ingredients are 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.

- Cancerogenity categories
  - EPA (Environmental Protection Agency)
    None of the ingredients is listed.
  - TLV (Threshold Limit Value established by ACGIH)
    None of the ingredients is listed.
  - MAK (German Maximum Workplace Concentration)
    None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.

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

(Contd. on page 9)
Hazard pictograms

GHS05

Signal word Danger

Hazard-determining components of labeling:
Tartaric acid

Hazard statements
Causes severe skin burns and eye damage.

Precautionary statements
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/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.
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

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

Department issuing MSDS: Regulatory affairs
Contact: msds@gceurope.com
Date of preparation / last revision 10/11/2014 / -
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
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)
NFPA: National Fire Protection Association (USA)
HMSI: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
Eye Dam. 1: Serious eye damage/eye irritation, Hazard 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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<th>Trade name: GC Fuji VII Liquid</th>
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