**SECTION 1: Identification**

- **1.1 Product identifier**
  - Trade name: CERASMART270

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - **Sector of Use**
    - SU22  Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
  - **Product category**
    - PC0  Other
  - **Process category**
    - PROC24  High (mechanical) energy work-up of substances bound in materials and/or articles
  - **Environmental release category**
    - ERC12a  Industrial processing of articles with abrasive techniques (low release)
  - **Article category**
    - AC4  Stone, plaster, cement, glass and ceramic articles

- **Application of the substance / the mixture**
  -Auxiliary for dental technology
  - HYBRID CERAMIC CAD/CAM BLOCK

- **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.
    - The product is not classified, according to the CLP regulation.

- **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.
    - **Hazard pictograms** Void
    - **Signal word** Void
    - **Hazard statements** Void

- **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.

(Contd. on page 2)
SECTION 4: First-aid measures

- 4.1 Description of first aid measures
- General information:
  No special measures required.
  If symptoms persist consult doctor.
- After inhalation: Take affected persons into fresh air and keep quiet.
- After skin contact: Immediately rinse with water.
- 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.

- 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:
  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

- 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.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  Remove persons from danger area.

- 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.
  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
   Prevent formation of dust.
   Any deposit of dust which cannot be avoided must be regularly removed.

· Information about protection against explosions and fires:
   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 systems: No further data; see item 7.

· 8.1 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.

· 8.2 Exposure controls
   · Engineering controls
     Always ensure that the extraction unit on your milling machine is in good working order.
   · Personal protective equipment:
     · General protective and hygienic measures:
       The usual precautionary measures for handling chemicals should be followed.
       Do not inhale dust / smoke / mist.
       Wash hands before breaks and at the end of work.
     · 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

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties
   · General Information
     · Appearance:
       Form: Solid mass
       Color: According to product specification
       Odor: Odorless
       Odor threshold: Not determined.
     · pH-value: Not applicable.


Trade name: CERASMART270

- Change in condition
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.

- Flash point: Not applicable.

- Flammability (solid, gaseous): Not determined.

- Ignition temperature: Undetermined.

- Decomposition temperature: Not determined.

- Auto igniting: Product is not selfigniting.

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

  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.

  - Flash point: Not applicable.

  - Flammability (solid, gaseous): Not determined.

  - Ignition temperature: Undetermined.

  - Decomposition temperature: Not determined.

  - Auto igniting: Product is not selfigniting.

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

  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.

- Vapor pressure: Not applicable.

- Density at 20 °C: 1.84 g/cm³

- Relative density: Not determined.

- Vapor density: Not applicable.

- Evaporation rate: Not applicable.

- Solubility in / Miscibility with Water: Insoluble.

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

- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.

- 9.2 Other information: 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.

  - LD/LC50 values that are relevant for classification: No further relevant information available.

  - Primary irritant effect:
    - on the skin: Based on available data, the classification criteria are not met.
    - on the eye: Based on available data, the classification criteria are not met.

  - 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: No further relevant information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

STOT - single exposure: Based on available data, the classification criteria are not met.

STOT - repeated exposure: Based on available data, the classification criteria are not met.

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:
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.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

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.
Contact waste processors for recycling information.

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 04 wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number

ADR, ADN, IMDG, IATA: not regulated

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA: not regulated
Trade name: CERASMART270

14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA
- Class not regulated

14.4 Packing group
- ADR, IMDG, IATA not regulated

14.5 Environmental hazards:
- Marine pollutant: No

14.6 Special precautions for user
- Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- Not applicable.

UN "Model Regulation": not regulated

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):
    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)
    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.
- Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
SECTION 16: Other information

· 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
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  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)
  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

· 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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