Safety Data Sheet
acc. to OSHA HCS

Printing date 05/22/2015
Version number 5
Reviewed on 04/21/2015

1 Identification

- Product identifier
  - Trade name: IPS Empress Esthetic Speed Powder

- 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:
    Ivoclar Vivadent Inc.
    175 Pineview Drive, Amherst, N.Y. 14228
    USA
    Tel. +1 800 533 6825
    Fax +1 716 691 2285

  - Ivoclar Vivadent Inc.
    1-6600 Dixie Road
    Mississauga, Ontario
    L5T 2Y2
    Canada
    Phone: +1 905 670 8499
    Fax: +1 905 670 3102

  - Information department: Quality Assurance / Regulatory Affairs

  - Emergency telephone number:
    24 Hour Emergency Assistance:
    Emergency-Call USA - Infotrac: 1-800-535-5053
    Emergency-Call Canada - Canutec: 1-613-996-6666

    General SDS Assistance:
    US: 1-800-533-6825
    Canada: 1-800-263-8182

2 Hazard(s) identification

- Classification of the substance or mixture
  - Carc. 1A H350 May cause cancer.
  - STOT RE 1 H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative.

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

- Hazard pictograms

  GHS08

  - Signal word Danger

  - Hazard-determining components of labeling:
    Quartz (SiO2) cristobalite

  - Hazard statements
    May cause cancer.

(Contd. on page 2)
Trade name: **IPS Empress Esthetic Speed Powder**

**Precautionary statements**

- **Route of exposure:** Inhalative.
- **Do not breathe dust/fume/gas/mist/vapors/spray.**
- **Get medical advice/attention if you feel unwell.**

**Classification system:**

- **NFPA ratings (scale 0 - 4)***
  - Health = 2
  - Fire = 0
  - Reactivity = 0

- **HMIS-ratings (scale 0 - 4)***
  - Health = *2
  - Fire = 0
  - Reactivity = 0

**Other hazards** Risk of lung damage (silicosis).

**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**Composition/information on ingredients**

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

**Dangerous components:**

<table>
<thead>
<tr>
<th>Substance Code</th>
<th>Substance Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>50-100%</td>
</tr>
<tr>
<td>1309-48-4</td>
<td>magnesium oxide</td>
<td>10-&lt;25%</td>
</tr>
<tr>
<td>14464-46-1</td>
<td>cristobalite</td>
<td>10-&lt;25%</td>
</tr>
</tbody>
</table>

**First-aid measures**

- **Description of first aid measures**
  - **After inhalation:**
    - Supply fresh air.
    - Seek medical treatment in case of complaints.
  - **After skin contact:**
    - Rinse with water.
    - Generally the product does not irritate the skin.
  - **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** No further relevant information available.
  - **Indication of any immediate medical attention and special treatment needed**
    - No further relevant information available.
5 Fire-fighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:**
    - The product is not flammable.
    - Use fire fighting measures that suit the environment.
  - **Special hazards arising from the substance or mixture**
    - In case of fire, the following can be released:
      - Nitrogen oxides (NOx)
      - Ammonia
- **Advice for firefighters**
  - **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Avoid formation of dust.
  - Ensure adequate ventilation
  - Use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **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**
    - Only adequately trained personnel should handle this product.
    - For use in dentistry only.
    - Ensure that suitable extractors are available on processing machines
    - Prevent formation of dust.
  - **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 the original receptacle.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** Store in dry conditions.
    - **Specific end use(s)** No further relevant information available.

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:**
    - 14808-60-7 Quartz (SiO2)
    - PEL see Quartz listing
### Safety Data Sheet

**Trade name:** IPS Empress Esthetic Speed Powder

### 40.1.5 REL Long-term value: 0.05* mg/m³
*respirable dust; See Pocket Guide App. A

TLV Long-term value: 0.025* mg/m³
*as respirable fraction

### 1309-48-4 magnesium oxide

PEL Long-term value: 15* mg/m³
fume; *total particulate

TLV Long-term value: 10* mg/m³
*as inhalable fraction

### 14464-46-1 cristobalite

PEL ½ value from respirable dust formulae for Quartz

REL Long-term value: 0.05* mg/m³
*respirable dust; See Pocket Guide App. A

TLV Long-term value: 0.025* mg/m³
*as respirable fraction

### Additional information:
The lists that were valid during the creation were used as basis.

### Exposure controls

- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    - Usual hygienic measures for dental practice.
    - Keep away from foodstuffs, beverages and feed.
    - Wash hands before breaks and at the end of work.
    - Do not inhale dust / smoke / mist.
    - Vacuum clean contaminated clothing. Do not blow or brush off contamination.

- **Breathing equipment:**
  - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
    - Filter P2
    - Filter P3

- **Protection of hands:** Not required.

- **Material of gloves:**

- **Penetration time of glove material:**

- **Eye protection:** Safety glasses

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - Form: Powder
    - Color: Light blue
  - **Odor:** Odorless
  - **Odour threshold:** Not determined.

- **pH-value (10 g/l) at 20 °C (68 °F):** ~6

- **Change in condition**
  - Melting point/Melting range: > 1400 °C (> 2552 °F)
  - Boiling point/Boiling range: Undetermined.

- **Flash point:** Not applicable.
10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability: Stable under normal handling and storage conditions.
- 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: None under normal conditions of storage and use.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - Primary irritant effect:
      - on the skin: No irritant effect.
      - on the eye: No irritating effect.
      - Sensitization: No sensitizing effects known.
      - Additional toxicological information: No further relevant information available.
    - Carcinogenic categories
      - IARC (International Agency for Research on Cancer)
        - 14808-60-7 Quartz (SiO2)
        - 14464-46-1 cristobalite
      - NTP (National Toxicology Program)
        - 14808-60-7 Quartz (SiO2)

*
Trade name: IPS Empress Esthetic Speed Powder

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- Behavior in environmental systems:
  - 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.
  - 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: Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number: Void
- DOT, ADR, ADN, IMDG, IATA: Void
- UN proper shipping name: Void
- DOT, ADR, ADN, IMDG, IATA: Void
- Transport hazard class(es)
  - DOT, ADR, ADN, IMDG, IATA: Void
  - Class: Void
- Packing group
  - DOT, ADR, IMDG, IATA: Void
- Environmental hazards:
  - Marine pollutant: No
- Special precautions for user: Not applicable.
Trade name: IPS Empress Esthetic Speed Powder

- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.
- Transport/Additional information: Product is not classified as a dangerous good for transport (ADR, IMDG, IATA).
- UN "Model Regulation": -

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances): None of the ingredients is listed.
    - Section 313 (Specific toxic chemical listings): None of the ingredients is listed.
  - TSCA (Toxic Substances Control Act):
    - 14808-60-7 Quartz (SiO2)
    - 1309-48-4 magnesium oxide
    - 14464-46-1 cristobalite

- 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):
    - 14808-60-7 Quartz (SiO2) A2
    - 1309-48-4 magnesium oxide A4
    - 14464-46-1 cristobalite A2
  - NIOSH-Ca (National Institute for Occupational Safety and Health):
    - 14808-60-7 Quartz (SiO2)
    - 14464-46-1 cristobalite

- GHS label elements
  The product is classified and labeled according to the Globally Harmonized System (GHS).
Trade name: IPS Empress Esthetic Speed Powder

- Hazard pictograms

GHS08

- Signal word Danger

- Hazard-determining components of labeling:
  Quartz (SiO2)
  cristobalite

- Hazard statements
  May cause cancer.
  Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative.

- Precautionary statements
  Do not breathe dust/fume/gas/mist/vapors/spray.
  Get medical advice/attention if you feel unwell.

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

* 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Date of preparation / last revision 05/22/2015 / 4

- 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)
  HMIS: Hazardous Materials Identification System (USA)
  Carc. 1A: Carcinogenicity, Hazard Category 1A
  STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

* * Data compared to the previous version altered.