

**Material Safety Data Sheet**  
acc. to ISO 11014

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.

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  - **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 (SiO<sub>2</sub>)  
cristobalite
  - **Hazard statements**  
May cause cancer.

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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.

· **Hazard description:**

· **WHMIS-symbols:**

D2A - Very toxic material causing other toxic effects



· **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.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

14808-60-7	Quartz (SiO <sub>2</sub> )	30-60%
1309-48-4	magnesium oxide	10-<25%
14464-46-1	cristobalite	10-<25%

### 4 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.

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- **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 (NO<sub>x</sub>)  
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.

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· **Control parameters**

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

**14808-60-7 Quartz (SiO<sub>2</sub>)**

EL Long-term value: 0.025 mg/m<sup>3</sup>  
ACGIH A2; IARC 1

EV Long-term value: 0.10\* mg/m<sup>3</sup>  
\*respirable fraction

**1309-48-4 magnesium oxide**

EL Short-term value: 10\*\* mg/m<sup>3</sup>  
Long-term value: 10\* 3\*\* mg/m<sup>3</sup>  
\*inhalable fume; \*\*respirable dust and fume

EV Long-term value: 10 mg/m<sup>3</sup>  
inhalable

**14464-46-1 cristobalite**

EL Long-term value: 0.025 mg/m<sup>3</sup>  
ACGIH A2; IARC 1

EV Long-term value: 0.05\* mg/m<sup>3</sup>  
\*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:** ~ 6

· **Change in condition**

**Melting point/Melting range:** > 1400 °C

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<b>Boiling point/Boiling range:</b>	Undetermined.
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not applicable.
· <b>Density:</b>	Not determined.
· <b>Bulk density at 20 °C:</b>	1100 - 1200 kg/m <sup>3</sup>
· <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>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
· <b>Other information</b>	No further relevant information available.

### 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**

· <b>IARC (International Agency for Research on Cancer)</b>	
14808-60-7	Quartz (SiO <sub>2</sub> )
14464-46-1	cristobalite

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· **NTP (National Toxicology Program)**

14808-60-7 Quartz (SiO<sub>2</sub>)

K

14464-46-1 cristobalite

K

· **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.
- **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**
- **DOT, TDG, ADN, IMDG, IATA** Void
- **UN proper shipping name**
- **DOT, TDG, ADN, IMDG, IATA** Void
- **Transport hazard class(es)**
- **DOT, TDG, ADN, IMDG, IATA**
- **Class** Void
- **Packing group**
- **DOT, TDG, IMDG, IATA** Void
- **Environmental hazards:**
- **Marine pollutant:** No

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- |  |  |
|--|--|
| <b>· Special precautions for user</b>  | Not applicable.  |
| <b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.  |
| <b>· Transport/Additional information:</b>                                       | Product is not classified as a dangerous good for transport (ADR, IMDG, IATA). |
| <b>· UN "Model Regulation":</b>  | -  |

### 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 (SiO <sub>2</sub> )
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1309-48-4	magnesium oxide
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14464-46-1	cristobalite
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- **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 (SiO <sub>2</sub> )	
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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 (SiO <sub>2</sub> )
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14464-46-1	cristobalite
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- **GHS label elements**

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

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· **Hazard pictograms**



GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

*Quartz (SiO<sub>2</sub>)  
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:**

*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)*

*WHMIS: Workplace Hazardous Materials Information System (Canada)*

*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.**

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