SAFETY DATA SHEETS

This SDS packet was issued with item:
077174618

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

070434456 070442491 070442509 070442517 070442525 070442533 070442541 070442558 070442566 070442574
070442582 070442590 070442608 070442616 070442624 070442632 070442640 070442657 070442665 070442673
070442681 070442699 070442863 070442867 070442897 070442913 070442921 070442939 070442947 070442954
077143605 077143613 077143621 077143639 077143647 077143654 077143753 077173008 077173016 077173024
077173032 077173040 077173057 077173065 077173313 077173321 077173339 077173347 077173354
077173362 077173370 077173388 077173396 077173404 077173412 077173420 077173438 077173446 077173453
077173461 077173479 077173487 077173495 077173503 077173511 077173529 077173537 077173545 077173552
077173560 077173578 077173586 077173594 077173602 077173610 077173628 077173636 077173644 077173651
077173669 077173677 077173685 077173693 077173701 077173982 077174006 077174014 077174022
077174030 077174048 077174055 077174063 077174071 077174089 077174139 077174147 077174154 077174162
077174170 077174188 077174196 077174204 077174212 077174220 077174238 077174279 077174287 077174295
077174303 077174311 077174329 077174337 077174345 077174352 077174360 077174378 077174501 077174519
077174527 077174535 077174543 077174550 077174568 077174576 077174584 077174592 077174600 077174626
077174634 077174642 077174659 077174650 077174675 077174683 077174691 077174709 077174717 077174725
077174733 077174741 077174758 077174765 077174760 077174768 077174769 077174774 077174782 077174808 077174816 077174824
077174832 077174840 077174899 077174907 077175318 077175359 077175383 077175706 077176118 077176126
077176134 077176142 077176159 077176167 077176175 077176183 077176191 077176209 077176217 077176225
077176233 077176241 077176258 077176264 077176274 077176282 077176290 077176308 077176316 077176407
077176415 077176423 077176431 077176449 077176456 077176464 077176472 077176480 077176498 273011110
273011792 273011794 273011992 273012248 273023177

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

070215517 077144843 077144850 273005804
# 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
  - Trade name: IPS e.max CAD
  - CAS Number: 66-402-68-1
  - EC number: 266-340-9
- **Relevant identified uses of the substance or mixture and uses advised against**
  - No further relevant information available.
  - Application of the substance / the preparation
    - Manufacture of dental prostheses
    - Lithium disilicate glass-ceramic ingot for the CAD/CAM 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 3499
      - Fax: +1 905 670 3102
- **Information department:** Quality Assurance / Regulatory Affairs
- **Emergency telephone number:**
  - 24 Hour Emergency Assistance:
    - Emergency-Call USA - Infotrac: 1-800-335-3053
    - Emergency-Call Canada - Canutec: 1-613-996-6666
- **General MSDS Assistance:**
  - US: 1-800-533-6825
  - Canada: 1-800-263-8183

# 2 Hazards identification

- **Classification of the substance or mixture**
  - The substance is not classified according to the Globally Harmonized System (GHS).
  - Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
  - Information concerning particular hazards for human and environment: Not applicable.
- **Label elements**
- **Labelling according to EU guidelines:**
  - The substance is not subject to classification according to the sources of literature known to us.
  - **Classification system:**
  - NFPA ratings (scale 0 - 4)
    - Health = 0
    - Fire = 0
    - Reactivity = 0

(Cont'd on page 2)
Safety Data Sheet
acc. to ISO/DIS 11014
Version number 4

Trade name: IPS e.max CAD

- HMIS-ratings (scale 0 - 4)
  HEALTH 0 Health = 0
  FIRE 0 Fire = 0
  REACTIVITY 0 Reactivity = 0

- Other hazards: Avoid breathing sanding dust /swarf.
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients
- Chemical characterization: Substances
- CAS No. Description
  66-02-68-4 ceramic materials
- Identification number(s) ---
- EC number: 266-340-9
- Description: Lithium disilicate glass-ceramic ingot

4 First aid measures
- Description of first aid measures
- General information: No special measures required.
- After inhalation: Grinding dust: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:
  Grinding dust: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  Mechanical effects only.
- After swallowing:
  Grinding dust: 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 Firefighting measures
- Extinguishing media
- Suitable extinguishing agents: The product is not flammable.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures
- Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up: Pick up mechanically.
Trade name: IPS e.max CAD

7 Handling and storage

Handling:
- Precautions for safe handling
  Only adequately trained personnel should handle this product.
  For use in dentistry only.

Additional 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: None.

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: Not required.

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.
    - Breathing equipment: Use respiratory protective device against the effects of dust.
    - Protection of hands: Not required.
    - Material of gloves:
      - Penetration time of glove material -
    - Eye protection:
      - Always wear safety goggles during mechanical processing (grinding, sawing/cutting, drilling, milling).

9 Physical and chemical properties

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

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

(Cord of page 2)
**Safety Data Sheet**

**Trade name:** IPS e.max CAD

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Product is not flammable.</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Insoluble.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

**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: The substance is not subject to classification.
- Carcinogenic categories
- NTP (National Toxicology Program)
- Substance is not 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: Generally not hazardous for water.
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 packings:
Recommendation: Disposal must be made according to official regulations.

14 Transport information

UN-Number
DOT, ADR, ADN, IMDG, IATA: Void

UN proper shipping name
DOT, ADR, ADN, IMDG, IATA: Void

Transport hazard class(es)
DOT, ADR, ADN, IMDG, IATA: Void

Class
Packaging group
DOT, ADR, IMDG, IATA: Void

Environmental hazards:
Marine pollutant: No

Special precautions for user
Not applicable.

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

UN "Model Regulation": -
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances):
      Substance is not listed.
    - Section 313 (Specific toxic chemical listings):
      Substance is not listed.
  - TSCA (Toxic Substances Control Act):
    Substance is not listed.
  - Proposition 65
    - Chemicals known to cause cancer:
      Substance is not listed.
    - Chemicals known to cause reproductive toxicity for females:
      Substance is not listed.
    - Chemicals known to cause reproductive toxicity for males:
      Substance is not listed.
    - Chemicals known to cause developmental toxicity:
      Substance is not listed.
  - Carcinogenic categories
  - EPA (Environmental Protection Agency)
    Substance is not listed.
  - TLV (Threshold Limit Value established by ACGIH)
    Substance is not listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    Substance is not listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    Substance is not listed.
  - Product related hazard informations:
    The substance is not subject to classification according to the sources of literature known to us.
  - National regulations:
    - Other regulations, limitations and prohibitive regulations
      The product is a medical device according to the EC-directive 93/42/EEC.
      This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and Drug Administration and Health Canada.
      - 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.

- Abbreviations and acronyms:
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemins de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)