1 Identification

- **Product identifier**
  - Trade name: **IPS e.max Press Invex Liquid**
  - Application of the substance / the mixture: Discharging agent

- **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**
  - Acute Tox. 4 H302 Harmful if swallowed.
  - Acute Tox. 4 H312 Harmful in contact with skin.
  - Eye Irrit. 2A H319 Causes serious eye irritation.
  - Carc. 1A H350 May cause cancer.

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

- **Hazard pictograms**

  ![GHS07](image1) ![GHS08](image2)

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - hydrofluoric acid
  - sulphuric acid

- **Hazard statements**
  - Harmful if swallowed or in contact with skin.
45.0

Causes serious eye irritation.
May cause cancer.

Precautionary statements
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with plenty of soap and water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTER/doctor if you feel unwell.
Specific measures (see on this label).
Wash contaminated clothing before reuse.

Classification system:
NFPA ratings (scale 0 - 4)
• Health = 1
• Fire = 0
• Reactivity = 0

HMIS-ratings (scale 0 - 4)
HEALTH 1
FIRE 0
REACTIVITY 0

Other hazards
Special safety notes for the use of IPS Ceramic Etching Gel: Hydrofluoric acid is highly toxic. It is strongly corrosive and does not cause any warning pain on the surface of skin and mucous membranes, but causes subsequent, painful in-depth effect.

Results of PBT and vPvB assessment
• PBT: Not applicable.
• vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description: Acids in aqueous solution

Dangerous components:
- CAS: 7664-93-9 sulphuric acid 1-%<2.5%
- CAS: 7664-39-3 hydrofluoric acid 0.1-%<1%

4 First-aid measures

Description of first aid measures
General information: Immediately remove any clothing soiled by the product.

After inhalation:
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact:
Immediately wash with water and soap and rinse thoroughly.
Rub in Ca-gluconate solution or Ca-gluconate gel immediately.
Seek medical treatment.

After eye contact:
Rinse opened eye for several minutes under running water.
Seek immediate medical advice.
Trade name: IPS e.max Press Invex Liquid

- After swallowing:
  Rinse out mouth and then drink plenty of water.
  Do not induce vomiting; immediately call for medical help.
- 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
    Antidote: Ca-gluconate solution / Ca-gluconate gel

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
  During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
  - Protective equipment: Mouth respiratory protective device.
  - Additional information: Cool endangered receptacles with water spray.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
  Dilute with plenty of water.
- Methods and material for containment and cleaning up:
  Use neutralizing agent.
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
- 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 good ventilation/exhaustion at the workplace.
    Open and handle receptacle with care.
  - Information about protection against explosions and fires: Keep respiratory protective device available.
- Conditions for safe storage, including any incompatibilities
  - Storage:
    Requirements to be met by storerooms and receptacles:
    Store only in the original receptacle.
    Attacks materials containing glass and silicate.
  - Information about storage in one common storage facility: Store away from flammable substances.
  - Further information about storage conditions:
    Keep receptacle tightly sealed.
Protect from heat and direct sunlight.

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.

Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>CAS</th>
<th>PEL Long-term value: 1 mg/m³</th>
<th>REL Long-term value: 1 mg/m³</th>
<th>TLV Long-term value: 0.2* mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 7664-93-9 sulphuric acid</td>
<td></td>
<td></td>
<td>*as thoracic fraction</td>
</tr>
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</tbody>
</table>

Ingredients with biological limit values:

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>BEI 3 mg/g creatinine</td>
</tr>
<tr>
<td>Medium: urine</td>
</tr>
<tr>
<td>Time: prior to shift</td>
</tr>
<tr>
<td>Parameter: Flourides (background)</td>
</tr>
<tr>
<td>10 mg/g creatinine</td>
</tr>
<tr>
<td>Medium: urine</td>
</tr>
<tr>
<td>Time: end of shift</td>
</tr>
<tr>
<td>Parameter: Flourides (background)</td>
</tr>
</tbody>
</table>

Further data; see item 7.

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:

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</tr>
</tbody>
</table>

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 and dental laboratories.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

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.

Recommended filter device for short term use: Combination filter E-P2
45. Protection of hands:

Protective gloves

After use of gloves apply skin-cleaning agents and skin cosmetics.

Material of gloves
- Butyl rubber, BR
- Fluorocarbon rubber (Viton)
- Chloroprene rubber, CR

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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:

Tightly sealed goggles

Body protection: Protective work clothing

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
  - Appearance:
    - Form: Fluid
    - Color: Colorless
    - Odor: Odorless
    - Odor threshold: Not determined.
  - pH-value at 20 °C (68 °F): 2.2 (ISO 787)
  - Change in condition
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: ~100 °C (~212 °F)
  - Flash point: Undetermined.
  - Flammability (solid, gaseous): Not applicable.
  - 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 determined.
  - Density at 20 °C (68 °F): ~1.008 g/cm³ (~8.412 lbs/gal)
  - Relative density: Not determined.
  - Vapor density: Not determined.
  - Evaporation rate: Not determined.
### 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**
  - Reacts with:
    - Ammonia
    - Sulfuric acid
  - Reacts with alkali (lyes).
  - Reacts with organic substances.
  - Reacts with metals forming hydrogen.
- **Conditions to avoid**: Keep away from heat and direct sunlight.
- **Incompatible materials**: Attacks materials containing glass and silicate.
- **Hazardous decomposition products**: None under normal conditions of storage and use.

### 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity**:
    - **on the skin**: No irritant effect.
    - **on the eye**: Irritating effect.
    - **Sensitization**: No sensitizing effects known.
  - **Additional toxicological information**: No further relevant information available.
  - **Carcinogenic categories**
    - **IARC** (International Agency for Research on Cancer)
      - CAS: 7664-93-9 sulphuric acid
    - **NTP** (National Toxicology Program)
      - CAS: 7664-93-9 sulphuric acid
    - **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.
Trade name: **IPS e.max Press Invex Liquid**

- **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:**
    - Use neutralizing agent.
    - 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, ADR/RID/ADN, ADN, IMDG, IATA Void
- **UN proper shipping name**
  - DOT, ADR/RID/ADN, ADN, IMDG, IATA Void
- **Transport hazard class(es)**
  - DOT, ADR/RID/ADN, ADN, IMDG, IATA
  - **Class** Void
- **Packing group**
  - DOT, ADR/RID/ADN, IMDG, IATA Void
- **Environmental hazards:**
  - **Marine pollutant:** No
- **Special precautions for user**
  - Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 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":** Void

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
  - **Section 355 (extremely hazardous substances):**
    - CAS: 7664-93-9 sulphuric acid
  - **Section 313 (Specific toxic chemical listings):**
    - CAS: 7664-93-9 sulphuric acid

(Contd. on page 8)
### Trade name: **IPS e.max Press Invex Liquid**

**TSCA (Toxic Substances Control Act):**
- CAS: 7664-93-9 sulphuric acid

**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)
  - CAS: 7664-93-9 sulphuric acid
  - A2
- 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).

**Hazard pictograms**

- GHS07
- GHS08

**Signal word** Danger

**Hazard-determining components of labeling:**
- hydrofluoric acid
- sulphuric acid

**Hazard statements**
- Harmful if swallowed or in contact with skin.
- Causes serious eye irritation.
- May cause cancer.

**Precautionary statements**
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF ON SKIN: Wash with plenty of soap and water.
- IF in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Call a POISON CENTER/doctor if you feel unwell.
- Specific measures (see on this label).
- Wash contaminated clothing before reuse.

**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.

(Contd. on page 9)
**Trade name: IPS e.max Press Invex Liquid**

- **Date of preparation / last revision:** 03/06/2018 / 8
- **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)
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
  - BEI: Biological Exposure Limit
  - Acute Tox. 4: Acute toxicity – Category 4
  - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
  - Carc. 1A: Carcinogenicity – Category 1A

* Data compared to the previous version altered.