1 Identification

- **Product identifier**
  - **Trade name:** Virtual Putty Regular / Fast Base

- **Relevant identified uses of the substance or mixture and uses advised against**
  - No further relevant information available.

- **Application of the substance / the mixture**
  - Dental impression material

- **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:**
  - cristobalite

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

(Contd. on page 2)
Trade name: Virtual Putty Regular / Fast Base

- Precautionary statements
  Get medical advice/attention if you feel unwell.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
- Additional information:
  Medical devices are exempt from the labeling provisions of GHS according to the Hazard Communication Standard (HCS).
- Classification system:
- NFPA ratings (scale 0 - 4)
  Health = 2
  Fire = 0
  Reactivity = 0
- HMIS-ratings (scale 0 - 4)
  HEALTH: Health = *2
  FIRE: Fire = 0
  REACTIVITY: Reactivity = 0
- Other hazards
- 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:
  14464-46-1 cristobalite ≤10%

4 First-aid measures
- Description of first aid measures
  - After inhalation:
    Supply fresh air and to be sure call for a doctor.
    In case of unconsciousness place patient stably in side position for transportation.
  - 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. Then consult a 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:
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture: No further relevant information available.
(Contd. of page 2)

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- 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.

(Contd. on page 4)
9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Pasty
      - Color: Blue
    - Odor: like peppermint
    - Odour threshold: Not determined.
    - pH-value: Not applicable.
  
- Change in condition
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.

- Flash point: Not applicable.

- 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: Not determined.
  - Relative density: Not determined.
  - Vapour density: Not determined.
  - Evaporation rate: Not determined.

- Solubility in / Miscibility with Water: Not miscible or difficult to mix.

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

- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
  - Other information: 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.
## 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) | 14464-46-1 cristobalite | 1 |
  | NTP (National Toxicology Program) | 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: 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 packagings
  - Recommendation: Disposal must be made according to official regulations.

## 14 Transport information

- UN-Number  
  - DOT, ADR, ADN, IMDG, IATA: Void
### 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):** All ingredients are listed.

- **Proposition 65**
  - **Chemicals known to cause cancer:**
    - 14464-46-1 cristobalite
  - **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)**
    - 14464-46-1 cristobalite
    - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
      - 14464-46-1 cristobalite
Trade name: Virtual Putty Regular / Fast Base

- 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:
  cristobalite
- Hazard statements
  May cause cancer.
  Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative.
- Precautionary statements
  Get medical advice/attention if you feel unwell.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
- National regulations:
  - Other regulations, limitations and prohibitive regulations
  The product is a medical device according to the 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.

- Date of preparation / last revision 05/04/2015 / 6
- 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.
1 Identification

· Product identifier
  · Trade name: Virtual Putty Regular / Fast Catalyst

· Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.

· Application of the substance / the mixture
  Dental impression material

· 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:
  cristobalite

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

(Contd. on page 2)
Trade name: Virtual Putty Regular / Fast Catalyst

40.1.5 • Precautionary statements
Get medical advice/attention if you feel unwell.
Dispose of contents/container in accordance with local/regional/national/international regulations.

• Additional information:
Medical devices are exempt from the labeling provisions of GHS according to the Hazard Communication Standard (HCS).

• Classification system:

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

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

• Other hazards
• 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:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>14464-46-1 cristobalite</td>
<td>≤10%</td>
</tr>
</tbody>
</table>

4 First-aid measures

• Description of first aid measures
  • After inhalation:
    Supply fresh air and to be sure call for a doctor.
    In case of unconsciousness place patient stably in side position for transportation.
  • After skin contact: Rinse with water.
  • After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
  • After swallowing: Seek medical treatment.
  • 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:
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
• Special hazards arising from the substance or mixture No further relevant information available.
Trade name: Virtual Putty Regular / Fast Catalyst

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- 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.
  - 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:
  - 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.
- 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.

- Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:
    Usual hygienic measures for dental practice.
    Wash hands before breaks and at the end of work.
    Keep away from foodstuffs, beverages and feed.
  - Breathing equipment: Not required.
  - Protection of hands:
    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
    After use of gloves apply skin-cleaning agents and skin cosmetics.
  - Material of gloves
    (Contd. on page 4)
Trade name: Virtual Putty Regular / Fast Catalyst

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

9 Physical and chemical properties

· Information on basic physical and chemical properties
  · General Information
    · Appearance:
      Form: Pasty
      Color: White
    · Odor:
      Odorless
    · Odour threshold:
      Not determined.
  · pH-value:
    Not applicable.

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

· Flash point:
  Not applicable.

· 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:
  Not determined.

· Relative density:
  Not determined.

· Vapour density:
  Not determined.

· Evaporation rate:
  Not determined.

· Solubility in / Miscibility with
  Water: Not miscible or difficult to mix.

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

· Viscosity
  Dynamic: Not determined.
  Kinematic: Not determined.

· Other information
  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.
Safety Data Sheet
acc. to OSHA HCS

Printing date 05/04/2015 Reviewed on 04/29/2015
Version number 7

Trade name: Virtual Putty Regular / Fast Catalyst

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:
    - Carcinogenic categories

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14464-46-1 cristobalite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program)</th>
</tr>
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<tbody>
<tr>
<td>14464-46-1 cristobalite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA-Ca (Occupational Safety &amp; Health Administration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

12 Ecological information

- Toxicty
  - 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 packagings
  - 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 Void

· Packing 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 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": -

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):
      · All ingredients are listed.

· Proposition 65

  · Chemicals known to cause cancer:
    · 14464-46-1 cristobalite

  · 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.
Trade name: Virtual Putty Regular / Fast Catalyst

- TLV (Threshold Limit Value established by ACGIH)
  14464-46-1 cristobalite

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  14464-46-1 cristobalite

- 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:
  cristobalite

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

- Precautionary statements
  Get medical advice/attention if you feel unwell.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

- National regulations:
  Other regulations, limitations and prohibitive regulations
  The product is a medical device according to the 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.

- Date of preparation / last revision 05/04/2015 / 6

- 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.