1 Identification

- Product identifier
  - Trade name: **Accu Dent System 1 / 2 - Syringe Accu Gel**
- Relevant identified uses of the substance or mixture and uses advised against
  - No further relevant information available.
- Application of the substance / the preparation
  - Auxiliary for manufacture of dental prothesis
- 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 MSDS Assistance:
      - US: 1-800-533-6825
      - Canada: 1-800-263-8182

2 Hazard(s) identification

- Classification of the substance or mixture
  - Classification according to Directive 67/548/EEC or Directive 1999/45/EC
    - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
    - Irritant: Irritating to eyes and respiratory system. May cause sensitisation by skin contact.
    - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
  - Classification system:
    - The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- Label elements
  - Labelling according to EU guidelines:
  - Code letter and hazard designation of product:
    - Harmful

(Contd. on page 2)
Trade name: Accu Dent System 1/2 - Syringe Accu Gel

- Hazard-determining components of labeling:
  Kieselguhr, soda ash flux-calcined
dipotassium hexafluorotitanate

- Risk phrases:
  Irritating to eyes and respiratory system.
  May cause sensitisation by skin contact.
  Harmful: danger of serious damage to health by prolonged exposure through inhalation.
  Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- Safety phrases:
  Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
  Avoid contact with skin.
  In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  Wear suitable gloves.
  This material and its container must be disposed of as hazardous waste.
  Avoid release to the environment. Refer to special instructions/safety data sheets.

- 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
  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:
  68855-54-9 Kieselguhr, soda ash flux-calcined 50-100%
  16919-27-0 dipotassium hexafluorotitanate 2.5-<5%
  1314-13-2 zinc oxide 1-<2.5%

4 First-aid measures

- Description of first aid measures
- After inhalation:
  Supply fresh air; consult doctor in case of complaints.
  In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
  Rinse with water.
  If skin irritation continues, consult a doctor.

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- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Rinse 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: 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.
- Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation
- 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:
  - Preventions 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.
  - 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.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment: Not required.

Protection of hands:

Protective gloves

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

Material of gloves

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 breakthrough 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:

Different according to coloring

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.
### 37.0.5 Other information
- Vapour density: Not determined.
- Evaporation rate: Not determined.
- Solubility in / Miscibility with Water: Not determined.
- 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.
- Hazardous decomposition products: None under normal conditions of storage and use.

### 11 Toxicological information
- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    - 1314-13-2 zinc oxide
      - Oral LD50 $> 5000$ mg/kg (rat)
    - Primary irritant effect:
      - on the skin: No irritant effect.
      - on the eye: Irritating effect.
      - Sensitization: Sensitization possible through skin contact.
    - Additional toxicological information:
      - The product shows the following dangers according to internally approved calculation methods for preparations:
        - Harmful
        - Irritant
  - Carcinogenic categories
    - NTP (National Toxicology Program)
      - 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.
Trade name: Accu Dent System 1 / 2 - Syringe Accu Gel

- Mobility in soil: No further relevant information available.
- Ecotoxicological effects:
  - Remark: Harmful to fish
- Additional ecological information:
  - General notes:
    Water hazard class 2 (Self-assessment): hazardous for water
    Do not allow product to reach ground water, water course or sewage system.
    Danger to drinking water if even small quantities leak into the ground.
    Harmful to aquatic organisms
- 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:
  - Not applicable.
- 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).
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:
        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)
        1314-13-2 zinc oxide II
      - TLV (Threshold Limit Value established by ACGIH)
        None of the ingredients is listed.
      - NIOSH-Ca (National Institute for Occupational Safety and Health)
        None of the ingredients is listed.
      - OSHA-Ca (Occupational Safety & Health Administration)
        None of the ingredients is listed.
  - Product related hazard informations:
    - Hazard symbols:
      Harmful
    - Hazard-determining components of labeling:
      Kieselguhr, soda ash flux-calcined
dipotassium hexafluorotitanate
    - Risk phrases:
      Irritating to eyes and respiratory system.
      May cause sensitisation by skin contact.
      Harmful: danger of serious damage to health by prolonged exposure through inhalation.
      Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
    - Safety phrases:
      Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
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Avoid contact with skin.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable gloves.
This material and its container must be disposed of as hazardous waste.
Avoid release to the environment. Refer to special instructions/safety data sheets.

National regulations:
- Other regulations, limitations and prohibitive regulations
  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.
1 Identification

- **Product identifier**

  - **Trade name:** Accu Dent System 1 / 2 - Tray Accu Gel

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

- **Application of the substance / the preparation**
  Auxiliary for manufacture of dental prothesis

- **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 - Canutech: 1-613-996-6666

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

2 Hazard(s) identification

- **Classification of the substance or mixture**

  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

    **Harmful**
    Harmful: danger of serious damage to health by prolonged exposure through inhalation.

    **Irritant**
    Irritating to eyes and respiratory system. May cause sensitisation by skin contact.

    **Dangerous for the environment**
    Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

  - **Classification system:**
    The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
Safety Data Sheet acc. to OSHA HCS

Printing date 11/19/2013 Reviewed on 11/18/2013

Trade name: Accu Dent System 1 / 2 - Tray Accu Gel

- Label elements
- Labelling according to EU guidelines:
- Code letter and hazard designation of product:
  - Harmful
  - Dangerous for the environment

- Hazard-determining components of labeling:
  - Kieselguhr, soda ash flux-calcined
  - Dipotassium hexafluorotitanate

- Risk phrases:
  - Irritating to eyes and respiratory system.
  - May cause sensitisation by skin contact.
  - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
  - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- Safety phrases:
  - Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
  - Avoid contact with skin.
  - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  - Wear suitable gloves.
  - Use appropriate container to avoid environmental contamination.
  - This material and its container must be disposed of as hazardous waste.

- 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
  - 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:
  - 68855-54-9 Kieselguhr, soda ash flux-calcined 50-100%
  - 16919-27-0 Dipotassium hexafluorotitanate 5-<10%
  - 1314-13-2 Zinc oxide 2.5-<10%

(Contd. of page 1)

(Contd. of page 3)
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.
    If skin irritation continues, consult a doctor.
  - After eye contact:
    Rinse opened eye for several minutes under running water. Then 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:
    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.
- Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Ensure adequate ventilation
- 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.
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.
  Keep away from foodstuffs, beverages and feed.
  Wash hands before breaks and at the end of work.
  Avoid contact with the eyes and skin.
- Breathing equipment: Not required.
- Protection of hands:

  Protective gloves

  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
  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: Different according to coloring
  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.
### 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**:
  - **LD/LC50 values that are relevant for classification**:
    - **1314-13-2 zinc oxide**
      - Oral [LD50] > 5000 mg/kg (rat)
  - **Primary irritant effect**:
    - **on the skin**: No irritant effect.
    - **on the eye**: Irritating effect.
    - **Sensitization**: Sensitization possible through skin contact.
  - **Additional toxicological information**:
    The product shows the following dangers according to internally approved calculation methods for preparations:
    - **Harmful**
    - **Irritant**
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- Carcinogenic categories
  - NTP (National Toxicology Program)
    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.
- Ecotoxicological effects:
  - Remark: Toxic for fish
  - Additional ecological information:
    - General notes:
      Also poisonous for fish and plankton in water bodies.
      Toxic for aquatic organisms.
      Water hazard class 2 (Self-assessment): hazardous for water.
      Do not allow product 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, 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:
  - Not applicable.
### 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:**
    - 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)**
    - 1314-13-2 zinc oxide

- **TLV (Threshold Limit Value established by ACGIH)**
  - None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**
  - None of the ingredients is listed.

- **Product related hazard informations:**

- **Hazard symbols:**
  - Harmful
  - Dangerous for the environment

- **Hazard-determining components of labeling:**
  - Kieselguhr, soda ash flux-calcined
Trade name: Accu Dent System 1 / 2 - Tray Accu Gel

- dipotassium hexafluorotitanate

· Risk phrases:
  - Irritating to eyes and respiratory system.
  - May cause sensitisation by skin contact.
  - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
  - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Safety phrases:
  - Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
  - Avoid contact with skin.
  - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  - Wear suitable gloves.
  - Use appropriate container to avoid environmental contamination.
  - This material and its container must be disposed of as hazardous waste.

· National regulations:
  - Other regulations, limitations and prohibitive regulations
    - 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.