1 Identification

- **Product identifier**
  - **Trade name:** Orthotex Conc.
  - **Article number:** 12979

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Diamond Chemical Company Inc.
    Corporate Headquarters
    Union Ave & DuBois Street
    EAST RUTHERFORD, NJ 07073
    USA
    Telephone: 201-935-4300

- **Information department:** Product safety department
- **Emergency telephone number:** INFOTRAC - 1-800-535-5053

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - GHS06 Skull and crossbones
  - Acute Tox. 3  H301 Toxic if swallowed.
  - GHS05 Corrosion
  - Skin Corr. 1A  H314 Causes severe skin burns and eye damage.
  - Eye Dam. 1  H318 Causes serious eye damage.
  - GHS07
  - STOT SE 3  H335 May cause respiratory irritation.

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

- **Hazard pictograms**
  - GHS05
  - GHS06

- **Signal word** Danger
- **Hazard statements**
  - Toxic if swallowed.
  - Causes severe skin burns and eye damage.
  - May cause respiratory irritation.

(Contd. on page 2)
Trade name: Orthotex Conc.

- **Precautionary statements**
  - If medical advice is needed, have product container or label at hand.
  - Keep out of reach of children.
  - Read label before use.
  - Do not breathe dusts or mists.
  - Wear eye protection / face protection.
  - Wash thoroughly after handling.
  - Do not eat, drink or smoke when using this product.
  - Use only outdoors or in a well-ventilated area.
  - If swallowed: Immediately call a poison center/doctor.
  - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - Specific treatment (see on this label).
  - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - Wash contaminated clothing before reuse.
  - If swallowed: Rinse mouth. Do NOT induce vomiting.
  - Store locked up.
  - Store in a well-ventilated place. Keep container tightly closed.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    - Health = 3
    - Fire = 0
    - Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    - HEALTH Health = 4
    - 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.

- **Components:**
<table>
<thead>
<tr>
<th>Prop. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1344-09-8 Silicic acid, sodium salt</td>
</tr>
<tr>
<td>1310-73-2 sodium hydroxide</td>
</tr>
<tr>
<td>497-19-8 Disodium carbonate</td>
</tr>
</tbody>
</table>

(Contd. on page 3)
4 First-aid measures

· Description of first aid measures
  · General information:
    Immediately remove any clothing soiled by the product.
    Symptoms of poisoning may even occur after several hours; therefore medical observation for at least
    48 hours after the accident.
  · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
  · After skin contact: Immediately wash with water and soap and rinse thoroughly.
  · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
  · After swallowing:
    Immediately call a doctor.
    Drink copious amounts of water and provide fresh air. Immediately call 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.
  · Advice for firefighters
    · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.
· Environmental precautions: Do not allow to enter sewers/surface or ground water.
· Methods and material for containment and cleaning up:
  Use neutralizing agent.
  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
    Thorough dedusting.
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**: No special requirements.
    - **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**:
    - **1310-73-2 sodium hydroxide**
      - **PEL**: Long-term value: 2 mg/m³
      - **REL**: Ceiling limit value: 2 mg/m³
      - **TLV**: Ceiling limit value: 2 mg/m³
  - **Additional information**: The lists that were valid during the creation were used as basis.
- **Exposure controls**
  - **Personal protective equipment**:
    - **General protective and hygienic measures**:
      - Keep away from foodstuffs, beverages and feed.
      - Immediately remove all soiled and contaminated clothing.
      - Wash hands before breaks and at the end of work.
      - Avoid contact with the eyes and skin.
    - **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.
  - **Protection of hands**:
    - **Protective gloves**:
      - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
      - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
    - **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.
Trade name: Orthotex Conc.

· 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

9 Physical and chemical properties

· Information on basic physical and chemical properties
  · General Information
  · Appearance:
    Form: Powder
    Color: White
  · Odor: Odorless
  · Odour threshold: Not determined.
  · pH-value at 20 °C (68 °F): 12.5
· Change in condition
  Melting point/Melting range: Undetermined.
  Boiling point/Boiling range: Undetermined.
· Flash point: Not applicable.
· Flammability (solid, gaseous): Not determined.
· Ignition temperature:
  Decomposition temperature: Not determined.
· 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 applicable.
· Density at 20 °C (68 °F): 1 g/cm³ (8.345 lbs/gal)
· Relative density: Not determined.
· Vapour density: Not applicable.
· Evaporation rate: Not applicable.
· Solubility in / Miscibility with
  Water: Soluble.
· Partition coefficient (n-octanol/water): Not determined.
· Viscosity:
  Dynamic: Not applicable.
10 Stability and reactivity

- Reactivity
- Chemical stability
  - 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: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      1310-73-2 sodium hydroxide
      Oral LD50 2000 mg/kg (rat)
  - Primary irritant effect:
    - on the skin: Strong caustic effect on skin and mucous membranes.
    - on the eye: Strong caustic effect.
    - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    The product shows the following dangers according to internally approved calculation methods for preparations:
    Harmful
    Corrosive
    Irritant
    Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
  - Carcinogenic categories
    - NTP (National Toxicology Program)
      None of the ingredients is listed.
    - OSHA-Ca (Occupational Safety & Health Administration)
      None of the ingredients is listed.
**Trade name: Orthotex Conc.**

- **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.
    - Must not reach bodies of water or drainage ditch undiluted or unneutralized.
    - Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.

- **Other adverse effects** No further relevant information available.

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**13 Disposal considerations**

- **Waste treatment methods**
  - **Recommendation:**
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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**14 Transport information**

- **UN-Number**
  - DOT, IMDG, IATA: UN2923

- **UN proper shipping name**
  - DOT: Corrosive solids, toxic, n.o.s.
  - IMDG: CORROSIVE SOLID, TOXIC, N.O.S. (SODIUM HYDROXIDE, Silicic acid, sodium salt)
  - IATA: CORROSIVE SOLID, TOXIC, N.O.S.

- **Transport hazard class(es)**
  - DOT
    - Class: 8 Corrosive substances
**Trade name: Orthotex Conc.**

<table>
<thead>
<tr>
<th>Label</th>
<th>8, 6.1</th>
</tr>
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<tr>
<td>IMDG</td>
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<tr>
<td>Class</td>
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<tr>
<td>Label</td>
<td>8/6.1</td>
</tr>
<tr>
<td>IATA</td>
<td>8 Corrosive substances</td>
</tr>
<tr>
<td>Label</td>
<td>8 (6.1)</td>
</tr>
</tbody>
</table>

- **Packing group**: II
- **Environmental hazards**: No
- **Special precautions for user**: Warning: Corrosive substances
  - **Danger code (Kemler)**: 86
  - **EMS Number**: F-A, S-B
  - **Segregation groups**: Alkalis
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**: Not applicable.

- **Transport/Additional information**:
  - **DOT**
    - **Quantity limitations**: On passenger aircraft/rail: 15 kg, On cargo aircraft only: 50 kg
  - **IMDG**
    - **Limited quantities (LQ)**: 1 kg
      - Code: E2
      - Maximum net quantity per inner packaging: 30 g
      - Maximum net quantity per outer packaging: 500 g
    - **Excepted quantities (EQ)**: Maximum net quantity per inner packaging: 30 g
  - **UN "Model Regulation"**: UN2923, Corrosive solids, toxic, n.o.s. (Sodium hydroxide, Silicic acid, sodium salt), 8 (6.1), II
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Section 355 (extremely hazardous substances):
    None of the ingredients is 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)
      None of the ingredients is listed.
    - 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.
  - GHS label elements
    The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
    ![GHS05](image) ![GHS06](image)

- Signal word Danger
- Hazard statements
  Toxic if swallowed.
  Causes severe skin burns and eye damage.
  May cause respiratory irritation.
- Precautionary statements
  If medical advice is needed, have product container or label at hand.
  Keep out of reach of children.
  Read label before use.
  Do not breathe dusts or mists.
  Wear eye protection / face protection.
  Wash thoroughly after handling.
  Do not eat, drink or smoke when using this product.
  Use only outdoors or in a well-ventilated area.
Trade name: Orthotex Conc.

If swallowed: Immediately call a poison center/doctor.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Wash contaminated clothing before reuse.
If swallowed: Rinse mouth. Do NOT induce vomiting.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

Department issuing SDS: Environment protection department.
Contact: Environmental Department
Date of preparation / last revision 04/20/2015 /
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Acute Tox. 3: Acute toxicity, Hazard Category 3
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3