1 Identification of the substance/mixture and of the company/undertaking

- **Product name:** Boltorn™ U3000
- **Application of the substance / the preparation**
  - Binder
  - Paint
  - Air drying resin for paints and coatings
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Perstorp Specialty Chemicals AB
    SE-284 80 Perstorp, Sweden
    Tel. +46 435 38000
    Fax +46 435 38100
    www.perstorp.com

  Perstorp Polyols, Inc.
  600 Matzinger Road
  Toledo, Ohio 43612
  Phone: 419-729-5448
  800-537-0280
  Fax: 419-729-3291

  - **Information department:** productinfo@perstorp.com
  - **Emergency telephone number:**
    (United States) - CHEMTREC 1-800-424-9300.
    (Int.) +46 8 337043 (Emergency Response Center, Sweden)

2 Composition/information on ingredients

- **Chemical characterization:** Substances Yes.
- **Chemical components:**
  - Fatty Acid Modified Dendritic Polyester 90-100%

3 Hazards identification

- **Hazard description:** No special hazards are associated with this product.
- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 1
    - Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**
  - HEALTH 0 Health = 0
  - FIRE 1 Fire = 1
  - REACTIVITY 0 Reactivity = 0

4 First aid measures

- **After inhalation:** First aid measures not required, but get fresh air for personal comfort.
Product name: **Boltorn™ U3000**

- **After skin contact:**
  First aid measures not required, but wash exposed skin with soap and water for hygienic reasons.
- **After eye contact:**
  First aid measures not required, but rinse opened eye under running water for personal comfort to avoid mechanical irritation.
- **After swallowing:** If a large quantity has been ingested or you feel unwell, get medical advice/attention.

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5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
  In case of fire, the following can be released:
  - Carbon monoxide (CO)
  - Carbon dioxide (CO2)
- **Protective equipment:**
  Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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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:**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
- **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.

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7 Handling and storage

- **Precautions for safe handling**
  Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
  - **Requirements to be met by storerooms and receptacles:**
    Store in cool, dry place in tightly closed receptacles.
  - **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.

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8 Exposure controls/personal protection

- **Components with limit values that require monitoring at the workplace:** Not required.
Material Safety Data Sheet acc. to ISO/DIS 11014

Product name: **Boltorn™ U3000**

**Additional information:**
- **OSHA-Ca (Occupational Safety & Health Administration)**
  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.

**Personal protective equipment:**
- **General protective and hygienic measures:**
  The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**
  - **Material of gloves**
    Nitrile rubber, NBR
    Chloroprene rubber, CR
  - **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:** If handled where risk of splashes may occur, use safety goggles.
- **Body protection:** Normal work clothes for the chemical industry (long legs and sleeves).
- **Limitation and supervision of exposure into the environment** Not required.

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th><strong>General Information</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance:</strong></td>
<td></td>
</tr>
<tr>
<td>Form:</td>
<td>Fluid</td>
</tr>
<tr>
<td>Color:</td>
<td>Yellow</td>
</tr>
<tr>
<td>Odor:</td>
<td>Characteristic</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range:</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Undetermined.</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>&gt; 100°C (&gt; 212 °F)</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous):</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong></td>
<td>Not explosive.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>Not oxidizing.</td>
</tr>
<tr>
<td><strong>Density at 20°C (68 °F):</strong></td>
<td>970 kg/m³</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with Water:</strong></td>
<td>Not miscible or difficult to mix.</td>
</tr>
</tbody>
</table>
10 Stability and reactivity

- Reactivity
  There exists no specific test data for this product. For further information, see the subsequent subsections of this chapter.
- Chemical stability
  The product is stable at normal conditions.
- Possibility of hazardous reactions
  No dangerous reactions known.
- Conditions to avoid
  None known.
- Incompatible materials
  None known.
- Hazardous decomposition products
  No dangerous decomposition products known.

11 Toxicological information

- Acute toxicity:
  - LD/LC50 values:
    - Oral LD50 >2000 mg/kg (rat)
- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: No irritating effect.
- Other information (about experimental toxicology):
  The studies regarding LD50 oral and irritation tests on eye and skin are made on a similar product.
- Additional toxicological information:
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
  The toxicological information for eye and skin irritation are based on a similar product.
- Sensitization
  No sensitizing effects known.
- Carcinogenicity
  No information available.

12 Ecological information

- Aquatic toxicity
  No further relevant information available.
- Persistence and degradability
  The product is readily biodegradable.
- BOD5
  >70 % (SS-EN-1899-1)
- Behavior in environmental systems
  No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  The product is not classified as hazardous waste.
Product name: Boltron™ U3000

· Uncleaned packagings:
  · Recommendation:
  Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

14 Transport information

· UN Number
  · DOT, ADR, ADN, IMDG, IATA -

· Proper shipping name (Technical Name)
  · DOT, ADR, ADN, IMDG, IATA -

· Transport hazard class(es)
  · DOT, ADR, ADN, IMDG, IATA -
  · Class -

· Packing group
  · DOT, ADR, IMDG, IATA -

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  Not applicable.

· Transport/Additional information:
  Not dangerous according to the above specifications.

15 Regulatory information

· Sara
  · Section 355 (extremely hazardous substances):
    Substance is not listed.
  · Section 313 (Specific toxic chemical listings):
    Substance is not listed.

· Carcinogenic categories
  · EPA (Environmental Protection Agency)
    Substance is not listed.
  · IARC (International Agency for Research on Cancer)
    Substance is not listed.
  · NTP (National Toxicology Program)
    Substance is not listed.

· Inventory status:
  · Australian Inventory of Chemical Substances (AICS)
    Substance is not listed.
  · Canadian Domestic Substance List (DSL)
    Substance is not listed.
  · Canadian Non Domestic Substance List (NDSL)
    Substance is not listed.
  · Chinese Chemical Inventory of Existing Chemical Substances (CIECS)
    Substance is not listed.
Product name: Boltorn™ U3000

- **European EINECS/ELINCS Listing**
  None of the ingredients is listed.
- **Japan Existing and New chemical Substance List (ENCS)**
  Substance is listed.
- **Korea Existing Chemical Inventory (KECI)**
  Substance is not listed.
- **New Zealand Inventory of Chemicals (NZIoC)**
  Substance is not listed.
- **Philippines Inventory of Chemicals and Chemical Substances (PICCS)**
  All ingredients are listed.
- **TSCA listing**
  None of the ingredients is listed.
- **Other regulations, limitations and prohibitive regulations**
  - **Proposition 65**
    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.

**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 MSDS:** Corporate EHSQ Perstorp Holding AB
- **Data compared to the previous version altered.**