### 1. IDENTIFICATION

**Product Identifier**

**Product Name**

Capa™ 2203A

**Other means of identification**

<table>
<thead>
<tr>
<th>Pure substance/mixture</th>
<th>Mixture</th>
</tr>
</thead>
</table>

**Recommended use of the chemical and restrictions on use**

**Application**

Adhesives, Binder, Manufacture of polyurethane, Plastics industry.

**Uses advised against**

Not identified.

**Details of the supplier of the safety data sheet**

<table>
<thead>
<tr>
<th>Manufacturer Address</th>
<th>Supplier Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perstorp UK Ltd</td>
<td>Perstorp Polyols, Inc.</td>
</tr>
<tr>
<td>Baronet Road</td>
<td>600 Matzinger Road</td>
</tr>
<tr>
<td>Warrington</td>
<td>Toledo, Ohio 43612</td>
</tr>
<tr>
<td>Cheshire WA4 6HA</td>
<td>Tel: 419-729-5448/ 800-537-0280</td>
</tr>
<tr>
<td>United Kingdom</td>
<td><a href="http://www.perstorp.com">www.perstorp.com</a></td>
</tr>
<tr>
<td>Tel. +44 (0) 1925 591111</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.perstorp.com">www.perstorp.com</a></td>
<td></td>
</tr>
</tbody>
</table>

**E-mail address**

productinfo@perstorp.com

**Emergency telephone number**

USA

(+1 866 519 4752 (contract no: 334101)

### 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

**Label elements**

**Symbols/Pictograms**

Not applicable

**Signal word**

None

**Hazard statements**

Not applicable

**Supplementary hazard information**

Caution - substance not yet fully tested.

**Hazards not otherwise classified (HNOC)**

Contact with product at elevated temperatures can result in thermal burns.

**Unknown Acute Toxicity**

100 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**
4. FIRST AID MEASURES

Description of first aid measures

Inhalation
First aid measures not required, but get fresh air for personal comfort.

Skin contact
First aid measures not required, but wash exposed skin with soap and water for hygienic reasons.

Eye contact
First aid measures not required, but rinse opened eye under running water for personal comfort to avoid mechanical irritation.

Ingestion
If a large quantity has been ingested or if you feel unwell, get medical advice/attention.

Most important symptoms and effects, both acute and delayed
None known.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Water spray (fog), Foam, Carbon dioxide (CO2), Extinguishing powder.

Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon monoxide (CO). Monomer (2-Oxepanone, Hexan-6-Olide, CAS 502-44-3).

Protective equipment and precautions for firefighters
In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Wear safety glasses, gloves, protective clothing and rubber boots for hygienic reasons.

Environmental precautions
Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment
Take up mechanically, placing in appropriate containers for disposal.

Methods for cleaning up
Clean contaminated surface thoroughly. After cleaning, flush away traces with water

Reference to other sections
See Section 7,8,13 for more information.
7. HANDLING AND STORAGE

Precautions for safe handling
Wear personal protective equipment according to section 8 if risk of exposure. Protect from direct sunlight. Keep away from heat.

Conditions for safe storage, including any incompatibilities
Keep/store only in original container. Keep tightly closed in a dry and cool place. Protect from sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls
Provide adequate ventilation when molten/hot product is handled. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures, such as personal protective equipment

<table>
<thead>
<tr>
<th>Eye/face protection</th>
<th>If handled where risk of splashes may occur, use safety goggles.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand Protection</td>
<td>Heat resistant gloves are recommended when handling molten materials.</td>
</tr>
<tr>
<td>Skin and body protection</td>
<td>Normal work clothes for the chemical industry (long-legged pants and sleeves).</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>45 - 55 °C / 113 - 131 °F</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td></td>
<td>Cleveland Open Cup</td>
</tr>
<tr>
<td>Flash point</td>
<td>275 °C / 527 °F</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td></td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive limits</td>
<td>Upper explosive limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Lower explosive limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>~ 200 °C / ~ 392 °F</td>
<td>No information available</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td></td>
<td>@ 60 °C</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>460 mPa s</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive.</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not oxidizing.</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>1.05 g/cm³</td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Information
No information available
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
Stable under normal conditions.

Possibility of Hazardous Reactions
None under normal processing

Conditions to avoid
To avoid thermal decomposition, do not overheat.

Incompatible materials
Avoid contact with acids. Avoid contact with bases.

Hazardous decomposition products
Possible decomposition and release of monomer at temperatures above 392°F.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Dermal. Inhalation.

Symptoms related to the physical, chemical and toxicological characteristics
None known.

Numerical measures of toxicity

Unknown Acute Toxicity 100 % of the mixture consists of ingredient(s) of unknown toxicity

Acute toxicity
Caution - mixture not yet fully tested. Due to the composition of the mixture and studies made on similar products we assume that the mixture is unclassified. The polymer is not bioavailable because of its molecular size.

Skin corrosion/irritation
No information available.

Serious eye damage/eye irritation
No information available.

Respiratory or skin sensitization
No sensitising effects known.

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Reproductive toxicity
No information available.

STOT - single exposure
No information available

STOT - repeated exposure
No information available

Aspiration hazard
No information available.
12. ECOLOGICAL INFORMATION

Toxicity
The polymer is not bioavailable because of its molecular size. Insoluble in water.

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability
No information available.

Bioaccumulative potential
No information available.

Mobility in soil
No information available.

Other adverse effects
None known.

13. DISPOSAL CONSIDERATIONS

Disposal methods
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Thoroughly emptied and clean packaging may be recycled.

14. TRANSPORT INFORMATION

DOT Road transport
Not regulated

RID Rail transport
Not regulated

IMDG Sea transport
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available

IATA Air transport
Not regulated

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations
Not applicable.

US Federal Regulations
SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and
Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Key or legend to abbreviations and acronyms used in the safety data sheet
Not applicable

Issue Date 10-Nov-2016
Revision Date 10-Nov-2016
Revision Note No information available


Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet