### Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Chemical Identifier</th>
<th>CELLOXIDE 2081[CEL 2081]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>ODP-OH-CEL2081-01</td>
</tr>
<tr>
<td>Reference Number</td>
<td>yuuki258-7</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>DAICEL CORPORATION</td>
</tr>
<tr>
<td>Company Name</td>
<td>DAICEL CORPORATION</td>
</tr>
<tr>
<td>Address</td>
<td>2-18-1, Konan, Minato-ku, Tokyo 108-8230, Japan</td>
</tr>
<tr>
<td>Company Contact</td>
<td>Organic Chemical Products Company</td>
</tr>
<tr>
<td>Phone Number</td>
<td>+81-3-6711-8211</td>
</tr>
<tr>
<td>Fax Number</td>
<td>+81-3-6711-8218</td>
</tr>
<tr>
<td>Emergency Phone Number</td>
<td>+81-3-6711-8211</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsible company for supply</th>
<th>Company Name</th>
<th>DAICEL (U.S.A.), INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>One Parker Plaza, 400 Kelby Street Fort Lee, New Jersey 07024</td>
<td></td>
</tr>
<tr>
<td>Phone Number</td>
<td>+1-201-461-4466</td>
<td></td>
</tr>
<tr>
<td>Fax Number</td>
<td>+1-201-461-2776</td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:inquiry@us.daicel.com">inquiry@us.daicel.com</a></td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Use and Restriction on Use ID**: CEL2081_US01_JP07

### Section 2 - HAZARDS IDENTIFICATION

**GHS Classification**

<table>
<thead>
<tr>
<th>Physicochemical Hazards</th>
<th>Flammable liquids Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrophoric liquids</td>
<td>Not classified</td>
</tr>
<tr>
<td>Health Hazards</td>
<td>Sensitization – skin Category 1</td>
</tr>
<tr>
<td>Other hazards that mentioned above are Not applicable or No data available.</td>
<td></td>
</tr>
</tbody>
</table>

**GHS Label Elements**

- **Symbols**
  ![Symbol](image)

**Signal Word**: Warning

**Hazard Statements**: H317 May cause an allergic skin reaction

**Precautionary Statements**

- **Prevention**: P261 Avoid breathing mist, vapors and spray.
- **Precautionary Statements**: P272 Contaminated work clothing should not be allowed out of the workplace.
- **Response**: P280 Wear protective gloves.
- **Precautionary Statements**: P362+P364 Take off contaminated clothing and wash it before reuse.
- **Precautionary Statements**: P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- **Precautionary Statements**: P333+P313 If skin irritation or rash occurs, get medical advice and attention.
Disposal Precautionary Statements
P501 Dispose of contents and container in accordance with local, regional and national regulations (to be specified).

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Distinction of Substance or Mixture</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name or Generic Name</td>
<td>Concentration or Its Ranges</td>
</tr>
<tr>
<td>Cycloaliphatic epoxide</td>
<td>≥99%</td>
</tr>
</tbody>
</table>

Impurities and/or Stabilizing Additives which Contribute to the Classification
No information available

Section 4 - FIRST AID MEASURES

Inhalation
Remove person to fresh air and keep comfortable for breathing.
Immediately call a doctor.
IF exposed or concerned: Get medical advice and attention.

Skin Contact
Take off or dispose of all polluted clothes.
Rinse skin with water or shower.
Immediately call a doctor.
Get medical advice and attention.

Eye Contact
Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do.
Continue rinsing.
Immediately call a doctor.
Get medical advice and attention.

Ingestion
Rinse mouth. Do NOT induce vomiting.
Immediately call a doctor.
Get medical advice and attention.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media
Small fires: Dry chemical, dry sand, alcohol-resistant foam.
Large fire: Dry chemicals, alcohol-resistance foam extinguishing agents and water sprinkling.

Unsuitable Extinguishing Media
Straight streams.

Specific Hazards
Fire may produce irritating, corrosive and/or toxic gases.
Contaminated fire fighting water or dilution water are corrosive and/or toxic and may cause damage to a person concerned with fire extinguishing.
May be ignited by heat, sparks or flames.

Specific Fire Fighting
Use extinguishing agent suitable for type of surrounding fire.
Move containers from fire area if you can do it without risk.

Protection of Fire Fighter
In fire fighting, wear respiratory protection and chemical protective clothing.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
Keep unauthorized personnel away.
Wear appropriate personal protective equipment (Refer to "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION") and avoid inhalation or contact with eyes and skin.
Environmental Precautions

Prevents Handling of Incompatible Substances or Mixtures

Handling Technical Measures

Do not handle containers with such manners as tumbling down, falling, exposing to shock, or dragging.

Refer to "Section 10 - STABILITY AND REACTIVITY".

Specific Hygiene Measures

Wash hand thoroughly after handling.

Methods and Equipment for Containment and Cleaning up

Pay attention not to cause the influence on the environment by discharging into rivers.

Stop leak if you can do it without risk.

A vapor suppressing foam may be used to reduce vapors.

All equipment used when handling the product must be grounded.

Small spills; absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for later disposal.

Small spills; Use clean non-sparking tools to collect absorbed material.

Large spills; prevent flowing out with a dike and collect it at a safe place.

Prevention Measures for Secondary Accidents

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area).

Isolate flammables (such as wood, paper, and oil) from the leakage.

Prevent flowing into drain, sewage, basement, and closed area.

Section 7 - HANDLING AND STORAGE

Handling

Do not handle until all safety precautions have been read and understood.

Handle at a well-ventilated place.

Avoid release to the environment.

Do not get in eyes, on skin or on clothing.

Ventilate the exhaust to keep the concentration in the air below the exposure limit.

Obtain special instructions before use.

Use properly by reading “Precautions for Use” labeled on the container before use or disposal.

Wash hand thoroughly after handling.

Prohibit use of heat, sparks, and fire in the surrounding area.

Do not contact, breathe or swallow.

Do not expose to temperatures exceeding appropriate temperature.

Do not breathe dust and fume.

Do not handle containers with such manners as tumbling down, falling, exposing to shock, or dragging.

Prevents Handling of Incompatible Substances or Mixtures

Refer to “Section 10 - STABILITY AND REACTIVITY”.

Provide ventilation system and use necessary personal protective equipment as described in "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION”.

Technical Measures

Isolate the site as a leak area by providing a zone that has an appropriate width to all directions.

Keep out of low areas.

Stay upwind.

Do not touch or walk through spilled material.

Pay attention not to cause the influence on the environment by discharging into rivers.

Methods and Equipment for Containment and Cleaning up

Stop leak if you can do it without risk.

A vapor suppressing foam may be used to reduce vapors.

All equipment used when handling the product must be grounded.

Small spills; absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for later disposal.

Small spills; Use clean non-sparking tools to collect absorbed material.

Large spills; prevent flowing out with a dike and collect it at a safe place.

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area).

Isolate flammables (such as wood, paper, and oil) from the leakage.

Prevent flowing into drain, sewage, basement, and closed area.

Do not get in eyes, on skin or on clothing.

Ventilate the exhaust to keep the concentration in the air below the exposure limit.

Obtain special instructions before use.

Use properly by reading “Precautions for Use” labeled on the container before use or disposal.

Wash hand thoroughly after handling.

Prohibit use of heat, sparks, and fire in the surrounding area.

Do not contact, breathe or swallow.

Do not expose to temperatures exceeding appropriate temperature.

Do not breathe dust and fume.

Do not handle containers with such manners as tumbling down, falling, exposing to shock, or dragging.

Prevents Handling of Incompatible Substances or Mixtures

Refer to “Section 10 - STABILITY AND REACTIVITY”.

Specific Hygiene Measures

Wash hand thoroughly after handling.
Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical Name or Generic Name</th>
<th>Exposure Limits (ACGIH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycloaliphatic epoxide</td>
<td>Not established</td>
</tr>
</tbody>
</table>

Engineering Controls

Workplace storing or handling this product should be equipped with eye washing station and safety shower.

Use process enclosures, local exhaust ventilation, or other engineering controls.

Install ventilation system to keep exposure to airborne contaminants below the exposure limit if vapor, fume, mist generates in the process handling at elevated temperature.

Take precautionary measures against static discharge.

Use explosion-proof electrical, ventilating and lighting equipment.

Install explosion-proof local ventilation equipment.

Ground or bond container and receiving equipment.

Personal Protective Equipment

Respiratory Protection

Wear NIOSH certified respirator.

Hand Protection

Wear impervious gloves.

Eye Protection

Protection glasses (ordinary glasses, ordinary glasses with side shields, and goggles).

Skin and Body Protection

Wear protective clothing and face protection.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form

Liquid

Color

Colorless or light yellow
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Slight odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial Boiling Point and Boiling Ranges</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>220°C (unknown)</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability or Explosive Limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower Limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper Limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity (Density)</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition Coefficient : n-Octanol/Water</td>
<td>It’s not self-ignite in contact with air at ambient temperature.</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Section 10 – STABILITY AND REACTIVITY**

- **Reactivity**: No information available
- **Chemical stability**: Stable under ordinary conditions of use and storage.
- **Possibility of Hazardous Reaction**: Contact with strong oxidizers, strong alkalis or strong acids may cause fire and explosions.
- **Conditions to Avoid**: Fire, heat, incompatibles.
- **Incompatible Substances or Mixtures**: Strong oxidizers, strong alkalis, or strong acids
- **Hazardous Decomposition Products**: Carbon dioxide and carbon monoxide may form when heated to decomposition.

**Section 11 – TOXICOLOGICAL INFORMATION**

- **Acute Toxicity**: No data available
- **Skin Corrosion/Irritation**: No data available
- **Serious eye damage/eye irritation**: No data available
- **Respiratory or Skin Sensitization**: Category 1 (Skin sensitization); It was set as Category 1 based on containing epoxy groups which sensitization results have been reported.

- **Germ Cell Mutagenicity**: Ames test; positive (as data of similar compound)
- **Carcinogenicity**: No data available
- **Reproductive Toxicity**: No data available
- **Specific target organ toxicity (single exposure)**: No data available
- **Specific target organ toxicity (repeated exposure)**: No data available
- **Aspiration Hazard**: No data available

**Section 12 – ECOLOGICAL INFORMATION**

- **Hazard to the aquatic environment (acute hazard)**: No data available
- **Hazard to the aquatic environment (long–term hazard)**: No data available
- **Ecotoxicity**: No information available
- **Hazard to the ozone layer**: No data available
Section 13 – DISPOSAL CONSIDERATIONS
Residual Waste
Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.
Disposal should be in accordance with applicable regulations and standards by the respective local governments.
When commissioning the disposal to a disposal company, notify the danger and toxicity thoroughly to the company.

Contaminated Container and Packaging
In case of disposal of empty containers, remove the content thoroughly.
Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.

Section 14 – TRANSPORT INFORMATION
International Regulations
Regulatory Information by Sea
Marine Pollutant: Not applicable
Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code: Not applicable

Emergency Response
Guide Number: Not applicable

Section 15 – REGULATORY INFORMATION
Details of international registration status:
ENCS(JP)
ECN(TW)

Section 16 – OTHER INFORMATION
Information Contact
See Sec.1 (Company identification)
Notice to Reader: To the best of our knowledge, the information contained herein is accurate.
However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of information contained herein.
Final determination of suitability of any material is the sole responsibility of the information contained herein.

Other Property
All materials may present unknown hazards and should be used with caution.
Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.