1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Zinc Hydroxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>SC-362090</td>
</tr>
</tbody>
</table>

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

For research use only. Not intended for diagnostic or therapeutic use.

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

Santa Cruz Biotechnology, Inc.

10410 Finnell Street
Dallas, TX 75220

831.457.3800
800.457.3801
scbt@scbt.com

**Emergency telephone number**

Chemtrec
1.800.424.9300 (Within USA)
+1.703.527.3887 (Outside USA)

2. HAZARDS IDENTIFICATION

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

**Classification**

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

**Label elements**

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statements</td>
<td>Not classified</td>
</tr>
<tr>
<td>Symbols/Pictograms</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Precautionary Statements - Prevention</th>
<th>Wash hands thoroughly after handling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautionary Statements - Response</td>
<td>IF exposed or concerned: Get medical advice/attention</td>
</tr>
</tbody>
</table>

**Hazards not otherwise classified (HNOC)**

Hazards not otherwise classified (HNOC) | Not applicable

**Other Information**

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Stability</td>
<td>0</td>
</tr>
<tr>
<td>Physical and chemical properties</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>1</th>
</tr>
</thead>
<tbody>
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<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Physical hazards</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Personal protection</td>
<td>-</td>
</tr>
</tbody>
</table>

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight %</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
</table>
4. FIRST AID MEASURES

First Aid Measures
General advice Consult a physician if necessary. Remove to fresh air.
Eye contact Wash with plenty of water.
Skin Contact Wash skin with soap and water.
Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
Ingestion Never give anything by mouth to an unconscious person. Clean mouth with water.

Most important symptoms and effects, both acute and delayed
Symptoms No information available.

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

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
In case of fire: Use CO2, dry chemical, or foam for extinction.
DO NOT USE WATER.

Specific hazards arising from the chemical
No information available.

Explosion data
No information available.

Protective equipment and precautions for firefighters
Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation, especially in confined areas.

Environmental precautions
See Section 12 for additional Ecological Information. Prevent product from entering drains. Should not be released into the environment.

Methods and material for containment and cleaning up
Prevent further leakage or spillage if safe to do so.
Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.
7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use personal protective equipment as required. Wash contaminated clothing before reuse. May cause damage to organs through prolonged or repeated exposure.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature.

Incompatible materials
Strong oxidizing agents. Water.

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

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and Body Protection
Wear protective gloves and protective clothing.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State
Solid

Appearance
powder or chunks

Odor
No information available

Property
Values

pH
No information available

Melting point/freezing point
125 °C

Boiling point
No information available

Flash point
No information available

Density
3.053 g/cm³

Evaporation rate
No information available

Upper flammability limits
No information available

Lower flammability limit
No information available

Vapor pressure
No information available

Vapor density
No information available

Specific gravity
No information available

Water solubility
No information available

Solubility in other solvents
No information available

Partition coefficient
No information available

Autoignition temperature
No information available

Decomposition temperature
No information available

Kinematic viscosity
No information available

Explosive properties
No information available

Oxidizing properties
No information available
10. STABILITY AND REACTIVITY

Reactivity Not applicable
Chemical stability Stable under recommended storage conditions.
Possibility of Hazardous Reactions None under normal processing.
Hazardous polymerization No information available.
Conditions to avoid Keep away from any possible contact with water, because of violent reaction and possible flash fire.
Incompatible materials Strong oxidizing agents. Water.
Hazardous Decomposition Products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Inhalation No data available.
Eye contact No data available.
Skin Contact No data available.
Ingestion No data available.

Information on toxicological effects
Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Chronic Toxicity No information available.

Numerical measures of toxicity - Product Information
Unknown acute toxicity No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity May cause long lasting harmful effects to aquatic life
100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.
Persistance and degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of wastes Should not be released into the environment. Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging Do not reuse container.
California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Hydroxide</td>
<td>Toxic</td>
</tr>
<tr>
<td>20427-58-1</td>
<td></td>
</tr>
</tbody>
</table>
14. TRANSPORT INFORMATION

DOT
UN/ID no
UN3077
Hazard Class
9
Packing Group
III
Proper shipping name
Environmentally hazardous substance, solid, n.o.s.
Description
UN3077, Environmentally hazardous substance, solid, n.o.s., 9, III
Emergency Response Guide Number
171

IMDG
UN/ID no
UN3077
Hazard Class
9
Packing Group
III
Proper shipping name
Environmentally hazardous substance, solid, n.o.s.
Description
UN3077, Environmentally hazardous substance, solid, n.o.s., 9, III
Special Provisions
274, 335, 966, 967
EmS-No
F-A, S-F

IATA
UN/ID no
UN3077
Hazard Class
9
Packing Group
III
Proper shipping name
Environmentally hazardous substance, solid, n.o.s.
Description
UN3077, Environmentally hazardous substance, solid, n.o.s., 9, III

15. REGULATORY INFORMATION

International Inventories
All of the components in the product are on the following Inventory lists
TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC) ENCS (Japan): Philippines (PICCS)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Hydroxide</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

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.

SARA 311/312 Hazard Categories
Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive hazard No
CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Hydroxide</td>
<td></td>
<td>X</td>
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<td></td>
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</table>

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Hydroxide</td>
<td>X</td>
<td>Not Listed</td>
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</tbody>
</table>

16. OTHER INFORMATION

Revision note  
No information available

Disclaimer
The information provided in this Material 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