

Zinc Hydroxide: sc-362090



The Power to Question

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Zinc Hydroxide
Product Number: sc-362090
Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, CA 95060
800.457.3801 or 831.457.3800
Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

2. HAZARDS IDENTIFICATION

Emergency overview

Flammable

Category of danger

Flammable. Dangerous for the environment.

NFPA rating

Health: 1
Flammability: 1
Reactivity: 0

Potential health effects

Inhalation: May cause irritation of respiratory tract.
Skin: May cause allergic skin reaction.
Eye: Avoid contact with eyes.
Ingestion: May be harmful if swallowed.

Principle routes of exposure

Skin

Statements of hazard

Flammable

Statement of spill or leak

ANSI Label Eliminate all ignition sources. Absorb and/or contain spill with inert materials (e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush spill area. Prevent runoff from entering waterways or sewers.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: ZnO₂H₂
Molecular weight: 99.40
CAS #: 20427-58-1

4. FIRST AID MEASURES

General advice

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

If inhaled

Move to fresh air. Call a physician immediately.

In case of skin contact

Rinse immediately with plenty of water and seek medical advice

In case of eye contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed

Do not induce vomiting without medical advice.

Protection of first-aiders

No information available.

Medical conditions aggravated by exposure

None known

5. FIREFIGHTING MEASURES**Suitable extinguishing media**

Dry Powder. Water mist may be used to cool closed containers.

Hazardous combustion products

Burning produces irritant fumes.

Special protective equipment for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Use personal protective equipment.

Environmental precautions

Prevent product from entering drains.

Methods and materials for containment and clean up

Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE**Precautions for safe handling**

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment.

Conditions for safe storage

Keep away from oxidizing and spontaneously flammable products. Store at room temperature.

8. EXPOSURE CONTROL/PERSONAL PROTECTION**Engineering measures**

Ensure adequate ventilation.

Personal protective equipment**Respiratory protection**

Breathing apparatus only if aerosol or dust is formed.

Hand protection

PVC or other plastic material gloves

Skin and body protection

Usual safety precautions while handling the product will provide adequate protection against this potential effect.

Eye protection

Safety glasses with side-shields

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Solid	Evaporation rate	Not applicable
Melting point/Melting range	> 290°C	Boiling point/Boiling range	Undetermined
Flash point	Not applicable	Autoignition Temperature	Not determined
Vapor pressure	Not applicable	Density	3.4 - 3.9 g/mL
Vapor density	Not applicable	Solubility (water)	Soluble

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Polymerization

None under normal processing.

Materials to avoid

May self-ignite in air. A strong reducing agent; reacts violently with oxidizers. Incompatible with acids, caustics, water, and sulfur. May accumulate static electrical charges, and may cause ignition.

Conditions to avoid

Exposure to air or moisture over prolonged periods

Hazardous decomposition products

Zinc oxides (ZnO)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Selected LD50 and LC50s: Not determined.

RTECS number

ZH3853000

Chronic toxicity

Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.

Local effects

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Specific effects

May include moderate to severe erythema (redness), and moderate edema (raised skin), nausea, headache and vomiting.

Primary irritant effect:

No data is available on the product itself.

Sensitization

No sensitizing effects known.

Carcinogenic effects

No data is available on the product itself.

Mutagenic effects

No data is available on the product itself.

Reproductive toxicity

No data is available on the product itself.

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Bioaccumulative potential

no data available

Aquatic toxicity

no data available

Mobility in soil

no data available

Components ZINC HYDROXIDE	U.S. DOT - Appendix B - Marine Pollutan Not Listed	U.S. DOT - Appendix B - Severe Marine Pollutants Not Listed	United Kingdom - The Red List: Not Listed
Components ZINC HYDROXIDE	Germany VCI (WGK) Not Listed	World Health Organization (WHO) - Drinking Water Not Listed	Ecotoxicity - Fish Species Data LC50 (96 hr) fathead minnow:6400 - 10,900 ug/L;100 mg CaCO3/L;LC50 (96 hr) rainbow trout:4800 - 7200 ug/L;juveniles, 333 - 504 mg CaCO3/L;LC50 (96 hr) bluegill:5400 ug/L:20 mg CaCO3/L
Components ZINC HYDROXIDE	Ecotoxicity - Freshwater Algae Data IC50 (96 hr) freshwater algae (Selenastrum capricornutum):30 ug/L:	Ecotoxicity - Microtox Data Not Listed	Ecotoxicity - Water Flea Data LC50 (72 hr) water flea:5 - 14 ug/L:Cond: 30 °C
Components ZINC HYDROXIDE	EPA - ATSDR Priority List Rank (of 275): 070	EPA - HPV Challenge Program Chemical List Not Listed	California - Priority Toxic Pollutants Maximum concentration = 120 ug/L; continuous concentration = 120 ug/L
Components ZINC HYDROXIDE	California - Priority Toxic Pollutants Not Listed	California - Priority Toxic Pollutants Maximum concentration = 90 ug/L; continuous concentration = 81 ug/L	

13. DISPOSAL CONSIDERATIONS

Waste from residues/unused products

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advertised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

Contaminated packaging

Do not re-use empty containers.

14. TRANSPORTATION INFORMATION

UN/Id No:	3077
ADR/RID	
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s.
Hazard Class	9 - Other miscellaneous materials
Packing group:	III
IMDG/IMO	
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s.
ICAO/IATA	
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s.
IATA Hazard Label(s):	Miscellaneous
Hazard Class	9 - Other miscellaneous materials
Packing group:	III
DOT:	
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s.
Hazard Class	9 - Other miscellaneous materials
Packing group:	III

Emergency Response Guide Number (ERG): 171

Appendix A Table 1 - Reportable Quantities

Zinc Hydroxide

RQ = 1000 pounds (454 kg)

The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches).

TDG (Canada):

WHMIS hazard class:

B4 Flammable Solids

D2b Toxic Materials



15. REGULATORY INFORMATION

SARA 313 notification

The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

State notification

The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

International Inventories

Components

Zinc Hydroxide

Canada DSL Inventory List

Present

Australia (AICS)

Present

Inventory - China

Present

EU EINECS List

243-814-3; H2O2Zn

Inventory - Japan

1-433

Korean KECL

KE-35555

Philippines PICCS

Present

Inventory - United States TSCA

Present

Section 8(b)

U.S. Regulations:

Components

	California Proposition 65	Massachusetts Right to Know List:	New Jersey Right to Know List:	Pennsylvania Right to Know List:
ZINC HYDROXIDE	- Not Listed	[present]	sn 2021 (dust and fume)	environmental hazard (any compound of this substance is also an environmental hazard)

Components

	Florida substance List:	Rhode Island Right to Know List:	Illinois - Toxic Air Contaminants	Connecticut - Hazardous Air Pollutants
ZINC HYDROXIDE	[present]	Flammable	Not Listed	Not Listed

Components

	SARA 313 Emission reporting/Toxic Release of Chemicals	CERCLA/SARA - Section 302 Extremely Haz	NTP:	IARC:
ZINC HYDROXIDE	form R reporting required for 1.0% de minimis concentration (only fume or dust)	Not Listed	None	None

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

11/11/2013