

**SOVEREIGN CHEMICAL COMPANY**

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Material Safety Data Sheet**Sovrez 1055 Z****1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION**

Manufacturer: Sovereign Chemical Company 1225 West Market Street Akron, Ohio 44313 Phone: 330-869-0500 Fax: 330-869-0518	Emergency Telephone Number: Chemtrec: 1-800-424-9300 (continental USA) (1)703-527-3887 (outside continental USA)
Trade Name: Sovrez 1055 Z	MSDS Number: 1752
Chemical Name: Heat reactive phenolic resin and zinc oxide	Synonyms: Phenolic resin and zinc oxide dispersion
Prepared By: Sovereign Chemical Company	Date of Revision: May 14, 2009 Revision: 3 (supersedes June 8, 2005) Change: 3 year update

2. INGREDIENTS

Component	CAS #	Percent	ACGIH (TLV)	OSHA (PEL)
Heat Reactive phenolic resin		67	NE	NE
Zinc oxide	1314-13-2	33	5 mg/m ³ (TWA dust) 10 mg/m ³ (total dust)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Product may contain traces of Formaldehyde	50-00-0		0.3 ppm	0.75 ppm

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

Yellow powder. Use appropriate personal protective equipment. During fire situations, irritating and toxic gases such as phenol, formaldehyde and oxides of carbon may be generated. Keep from entering storm or sanitary sewers, ground water, or soil. High concentration of airborne dust may form explosive mixture with air. Ensure that good housekeeping practices are followed. Keep material away from sources of heat and ignition. Use with adequate ventilation. Avoid contact with eyes, skin and clothing; avoid breathing dust, vapors or fumes. Wash hands thoroughly after handling the product. The product may cause respiratory sensitization, skin sensitization and/or lung irritation. This product may contain or release formaldehyde.

HMIS Rating: Health -2, Flammability - 0, Reactivity - 0, Personal Protection Equipment - E* - safety glasses, gloves, dust mask

*This is recommended personal protection equipment, final personal protection equipment should be determined by the plant safety department based on the actual conditions under which the product is used.

POTENTIAL HEALTH EFFECTS:

Eye: Acute overexposure may cause irritation.

Skin Contact: May cause irritation. Can cause dermatitis.

Ingestion: May cause nausea; vomiting; diarrhea and/or gastritis.

Inhalation: Dust or vapors may be irritating to the respiratory tract and cause coughing or sneezing. Zinc oxide portion can cause systemic Metal Fume Fever – symptoms are dry throat, cough, chills, fever, tight chest, fatigue, aching, nausea and vomiting. Lung irritant. Sensitizer may cause respiratory sensitization.

Chronic: May cause dermatitis or other skin irritations over long periods of exposure. Chronic exposure to heated dust or fumes of zinc oxide may cause Metal Fume Fever and dermatitis. Chronic exposure can aggravate pre-existing lung disease. May contain formaldehyde which is probably carcinogenic to humans with evidence of carcinogenicity to animals(IARC). Potential Cancer Hazard (OSHA).

Medical Conditions Prone To Aggravation By Exposure: As with any organic compound that is heated to vaporization, exposure may aggravate pre-existing conditions such as colds, allergies, asthma, emphysema and psoriasis.

4. FIRST AID MEASURES

Skin: Remove contaminated clothing and wash the exposed skin with large amounts of water. See a physician if irritation persists.

Eye: Immediately flush eyes with flowing water for at least 15 minutes. See a physician if irritation persists.

Ingestion: If the material is swallowed, get immediate medical attention or advice. If the victim has good gag reflex, you can consider giving several ounces of water for dilution. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

FLASH POINT: > 201°F (94°C)-Resin **LEL:** ND **UEL:** ND **AUTO IGN. TEMP. :** ND

Use dry chemical, regular foam or carbon dioxide to extinguish fires. DO NOT USE SOLID WATER STREAM AS IT MAY SCATTER AND SPREAD FIRE. In the event of fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full face piece, operated in the positive pressure mode. During fire situations, irritating and toxic gases such as phenol, formaldehyde and oxides of carbon may be generated. Dust generated during handling or storage can create explosive mixtures in the air.

The resin in this formulation can accumulate static charges from material handling management. Bond and ground as appropriate.

6. ACCIDENTAL RELEASE MEASURES

Ventilate the area and remove all ignition sources. Take up any spilled product by mechanical means (avoid dust formation) and place into sealed containers for proper disposal. Do not wash into sewer. Dispose of waste materials including empty product bags or drums in accordance with Local, State and Federal regulations.

7. HANDLING AND STORAGE

Do not store near acids, strong oxidizing agents open flames or at high temperatures. Avoid dispersion of dust into air to reduce potential explosion hazard. Eliminate ignition sources. Conveying and processing equipment should be spark proof, bonded, and grounded to prevent static charge build-up. Maintain good housekeeping standards to prevent accumulations of dust. Refer to NFPA pamphlet #654, "Prevention of Fire and Dust Explosion in the Chemical, Dye, Pharmaceutical and Plastics Industry". Keep powder dry and away from strong acids and strong oxidizing agents.

8. EXPOSURE CONTROL - PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust ventilation should be provided to levels below those specified in Section 2. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practices" published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.

RESPIRATORY: Use OSHA approved dust mask or air supplied mask if the permissible exposure limit is exceeded.

EYE and FACE PROTECTION: Safety glasses with side shields are recommended for any type of handling. Dust-tight goggles are recommended for dusty operations of areas where vapors accumulate.

PROTECTIVE GLOVES: Gloves impervious to dust or vapor.

GENERAL: Neoprene or nitrile rubber coated apron or other body covering may be required if there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Yellow powder	MELT POINT: 80-95°C (176-203°F) (resin portion)
VAPOR DENSITY (AIR=1): NA	OCTANOL/WATER PARTITION COEFFICIENT: NE
VAPOR PRESSURE: NA	EVAPORATION RATE BuOAC = 1: NA
ODOR: Odorless	SPECIFIC GRAVITY: 2.5
% VOLATILE BY VOLUME: NA	BOILING POINT: NA
% SOLUBILITY (H₂O) : < 1 %	pH: NA

10. STABILITY AND REACTIVITY

STABILITY & POLYMERIZATION: Stable, hazardous polymerization will not occur.

INCOMPATIBILITY (CONDITIONS TO AVOID): Heat, open flame, prolonged storage at elevated temperatures. Acids and strong oxidizing agents. Zinc oxide and magnesium react explosively when heated. Caution should be used under heated conditions where reaction may occur with chlorinated rubber.

HAZARDOUS DECOMPOSITION PRODUCTS: Phenol, formaldehyde, and oxides of carbon

SPECIAL SENSITIVITY: None that are known.

11. TOXICOLOGICAL INFORMATION

While OSHA 29CFR 1910.1200 emphasizes the use of industrial-human-data for work place hazard evaluations, relatively few materials have such data available as toxicological information is obtained from tests conducted on or with animals used as surrogates for humans. Therefore the effects and symptoms represented may not reflect actual work place exposures. All materials used in a given work area should be evaluated by a competent person who can then advise the involved workers of health effects or symptoms if any, they may experience from their assigned jobs.

For Resin Portion: FORMALDEHYDE

Acute Toxicity:

Ingestion: Oral LD50[RAT]: 100mg/kg

Local Effects:

Inhalation: FORMALDEHYDE LC50 {RAT}: 165 ppm

Eye-contact: Possible temporary irritation due to dust (physical effect of dust).

Mucous membrane-contact: Transitory irritation possible due to dust.

Carcinogenicity: NTP - yes IARC - yes

Formaldehyde is listed by NTP as an anticipated human carcinogen. Formaldehyde is listed by IARC as a probable human carcinogen (Group 2B). This product contains < 0.1% formaldehyde.

For Zinc Oxide Portion:

Acute Toxicity:

Inhalation: TCLO, inhalation, human, 10 minutes: 600 mg/m³

Ingestion: LD 50, oral rat 6846 mg/kg

Skin-Contact: (Human) Repeated exposure to zinc oxide by skin contact have resulted in popular-pustular skin eruptions in the axilla, inner thigh, inner arm, scrotum and pubic area

Local Effects:

Inhalation: Irritating to respiratory system.

Skin-contact: Irritating to skin.

Eye-contact: Draize assay (eyes, rabbit) : 500 mg/24 hour

Chronic Effects: Prolonged inhalation of dust or fumes when heated may cause Metal Fume Fever from the zinc oxide portion.

12. ECOLOGICAL INFORMATION

Non-biodegradable resins mixed with zinc oxide. Do not discharge into sewers or the environment. The product is essentially insoluble in water.

13. DISPOSAL CONSIDERATIONS

Product, all product residues and packaging should be disposed of in an EPA approved incinerator or landfill in accordance with all local, state, and/or federal regulations.

CERCLA/RCRA:

Hazardous substances and their Reportable Quantities:

FORMALDEHYDE 50-00-0 100 lb. final RQ; 45.4 kg final RQ

This product contains zinc oxide which does not meet the criteria outline in 40 CFR, Part 261, Subpart B as a Hazardous Waste Material according to the Resource Conservation and Recovery Act of 1976.

Because this product is considered a zinc compound (zinc oxide) it is subjected to reporting under -Superfund 40 CFR 302.4.

14. TRANSPORTATION INFORMATION

U.S. DOT and Canadian TDG: Not regulated unless shipped as a waste.

15. REGULATORY INFORMATION

WHMIS: 1% (zinc oxide portion); D2A, D2B

Canada – ARET: FORMALDEHYDE 50-00-0 B3(meets or exceeds toxicity criteria)

TSCA Inventory Status: All ingredients of this product are listed on the TSCA Inventory

SARA Title III, Section 313: Zinc oxide is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Resin portion is not listed under Section 313.

California Proposition 65: This product does not contain any chemicals currently on the California List of known Carcinogens and Reproductive Toxins.

16. OTHER INFORMATION

NA = Not Applicable

NE = Not Established

ND = Not Determined

Information contained in this MSDS sheet have been gathered from the following documents:

Chemical REG-A-DEX

Environmental Library on CD

NIOSH Pocket Guide to Chemical Hazards,

ACGIH Threshold Limit Values,

Transportation of Dangerous Goods

HMIS Implementation Manual (2nd Edition)

Toxicity and Safe Handling of Rubber Chemicals

IARC WEB Site

NTP WEB Site

IMPORTANT SAFETY NOTICE: The information in the Material Safety Data Sheet relates only to the specific material(s) described herein and does not relate to use in combination with any other material or substance or in any process. We believe that the information contained herein is current as of the date of issue of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of this product are not within the control of Sovereign Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.

Users of this product should study this Material Safety Data Sheet and become aware of the product hazards and safety information before using the product. Users should also notify their employees, agents, and contractors of the information on this Material Safety Data Sheet and any product hazards and safety information in order to provide safe use of this product.

Sovereign Chemical Company
1225 West Market Street
Akron, OH 44313

Dear Customer:

Section 313 of SARA Title III (also known as the Emergency Planning and Community Right-to-Know Act, or EPCRA) require certain suppliers of mixtures or trade name products to notify their customers when such mixtures or trade name products contain chemicals listed in Section 313. This letter constitutes a supplier notification that the following product you ordered contains one or more chemicals on the Section 313 list (*) as noted below:

Product Name:	Sovrez 1055 Z	
Chemical Name (*)	CAS #	% Composition
Zinc Oxide*	1314-13-2	33

*Zinc oxide is listed under the general category of zinc compounds.

In addition, an MSDS for this product is enclosed for your use.

If you are a distributor and you sell this product to another customer (s), you are required under Section 313 to furnish the same information and MSDS to that customer (s).

If you have any questions, please do not hesitate to contact our Technical Department at 330-869-0500.

Sovereign Chemical Company