

Revision Date:
Date of Printing:

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: PERKACIT ZBEC

MSDS NO. FLXP0024

Chemical Name: Zinc Dibenzyldithiocarbamate

Synonyms: Bis(Dibenzyldithiocarbamato)zinc; Zinc bis[bis(phenylmethyl)carbamodithioato-kappa S, kappa S'-]-(T-4)-

Use: Accelerator.

Manufactured By: Emergency Telephone: Flexsys America L.P. 260 Springside Drive Akron OH 44333 USA CHEMTREC: 1-800-424-9300 (TOLL FREE - USA and Territories) 703-527-3887 (ELSEWHERE - Collect Calls Accepted)

CANUTEC: 613-996-6666 (Canada)

SETIQ:

91-800-00-214 (Mexico)

Prepared By:

Flexsys America Product Safety Phone (330) 668-8281 FAX (330) 668-8281

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components/CAS# Percent

Zinc Dibenzyldithiocarbamate

96-99

14726-36-4

30-33

White Mineral Oil 8042-47-5

0-2

3. HAZARDS IDENTIFICATION

Hazard Information

Emergency Overview: WARNING! Combustible dust - explosion potential. This material is irritating to skin, eyes and

respiratory tract. May cause alcohol intolerance.

Eye Contact:

Causes mild eye irritation . Mild Eye Irritation: signs/symptoms can include redness, swelling, pain,

and tearing.

Skin Contact:

May cause an allergic skin reaction. May be absorbed through the skin and product effects similiar

to those caused by inhalation and/or ingestion.

Inhalation:

Exposure to dust particles generated from this material may cause irritation of the respiratory tract.

Inhalation may cause alcohol intolerance

Ingestion:

May cause alcohol intolerance (Antabuse Effect) May cause headache, dizziness, nausea,

vomiting, gastrointestinal irritation.

4. FIRST AID MEASURES



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HARWICK STANDARD DISTRIBUTION CORPORATION

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get

medical attention if irritation persists.

On Skin: Remove contaminated clothing and launder before reuse. Wash with soap and water. If irritation

persists or signs of toxicity occur, seek medical attention.

Inhaled: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get

immediate medical attention.

Swallowed: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician.

Never give anything by mouth to an unconscious person.

Notes To Physician: Treat symptomatically. Exposure by ingestion, inhalation or skin absorbtion may cause alcohol

intolerance (Antabuse Effect)

5. FIRE FIGHTING MEASURES

Flash Point (°F/C): 200°F / 93.3°C

Flash Point Method: Tag Closed Cup [TCC]

Autoignition Temp. (°F/C): 896°F / 480°C Lower Explosion Limit in Air (LEL): 40 g/m3

Upper Explosion Limit in Air (UEL): Not Determined.

Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical

Special Exposure Hazards: Fight fire from a safe distance and from a protected location. Use water spray to

cool fire exposed surfaces. Decomposition in fire may produce toxic gases. Do not

allow runoff to enter waterways.

Special Protective Equipment: Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

Unusual Fire/Explosion Hazards: Toxic emissions may result if product is involved in a fire. May form flammable

air/dust mixtures. Kst = 168 bar.m/s. Minimum Ignition Energy (MIE) = <3 mJ.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Wear protective equipment specified. Avoid the generation of dust. Sweep,

vacuum, or shovel and place into closable container for disposal.

Procedure for Cleaning/Absorption: Isolate area and remove sources of friction, impact, heat, low level electrical

current, and RF energy. Scoop up and remove. Do NOT spread spilled product with

water.

CERCLA Reportable Quantity (RQ): Not Applicable

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid generating or breathing dust. Wash thoroughly with soap

and water after handling. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Reclose containers of unused product. Keep containers tightly closed when not in use. Do not reuse

this container.

Storage: Store closed containers in a cool, dry, well-ventilated area. Store away from strong oxidizing materials.

Avoid exposure to direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Wear safety glasses or goggles to protect against exposure.

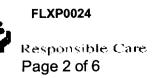
Skin Protection:

Normal work coveralls. Launder contaminated clothing before reuse.

Gloves:

Use gloves as a standard industrial handling procedure. Appropriate chemical resistant

gloves should be worn. All cleanable impervious glove types are acceptable.



Use in a well ventilated area. Use approved NIOSH respiratory protection if TLV **Respiratory Protection:**

exceeded..... Or over exposure is likely. Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure. General: local exhaust ventilation as necessary to control any air contaminants to within

their exposure limits during the use of this product. Adequate ventilation should be provided to keep dust concentrations below acceptable exposure limits. Discharge from the

ventilation system should comply with the applicable air pollutions control regulations.

Eliminate ignition sources.

Airborne Exposure Limits:

Nuisance Dust. OSHA PEL/8Hr-TWA = 15 mg/m3 (Total Dust). OSHA PEL/8-Hr TWA = 05 mg/m3 (Respirable Dust). ACGIH TLV/8-Hr TWA = 10 mg/m3. White Mineral Oil OSHA

PEL/8-Hr TWA = 5mg/m3 ACGIH TLV/8-Hr TWA = 5mg/m3.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Ventilation:

White to off-white powder

Odor:

SLIGHT N/A

pH: Specific Gravity:

1.42 @20°C

Density:

1420 kg/m3 @20°C

Bulk Density:

260-300 kg/m3 @20°C (Powder); 500-550 kg/m3 (Granules)

Melting Point (°F/C):

352°F / 178°C

Boiling Point (°F/C): Vapor Pressure:

Not Determined Negligible @ 20°C Vapor Density (Air=1): Not Determined

% Volatile by Volume: <0.5% by weight Solubility in Water:

Practically Insoluble.

Other Solubility:

Soluble in Benzene Carbon Disulfide Organic liquids, including fats and oils Acetone

Viscosity:

Not Applicable.

Other Data: Molecular Weight: Zinc Content: 10.2-11.5%

Molecular Formula: C30-H28-N2-S4-Zn

610

STABILITY AND REACTIVITY

Chemical Stability:

Stable when stored at room temperature in closed, original container. Stable under

normal conditions of handling, use and transportation.

Hazardous Polymerization:

Will not occur

Conditions to Avoid:

Keep away from heat, sparks and flame. Avoid contact with strong oxidants such

as liquid chlorine and concentrated oxygen.

Materials to Avoid:

Strong oxidizing agents. Acids.

Hazardous Decomposition Products:

Additional Guidelines:

Carbon monoxide. Oxides of nitrogen. Oxides of sulfur Toxic zinc metal fumes

Not Applicable

11. TOXICOLOGICAL INFORMATION

Target Organs

Acute Oral LD50 (mg/kg):

>5000 mg/kg (Rat)

Acute Dermal LD50 (mg/kg): Acute Inhalation LC50 (mg/l): Not Determined Not Determined

Principle Routes of Exposure:

Dermal - skin. Inhalation.

Ingestion:

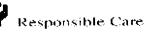
May cause alcohol intolerance (Antabuse Effect) May cause headache, dizziness,

nausea, vomiting, gastrointestinal irritation.

Skin Contact:

May cause an allergic skin reaction. May be absorbed through the skin and





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product effects similiar to those caused by inhalation and/or ingestion.

Exposure to dust particles generated from this material may cause irritation of the

respiratory tract. Inhalation may cause alcohol intolerance

Causes mild eye irritation. Mild Eye Irritation: signs/symptoms can include **Eye Contact:**

redness, swelling, pain, and tearing.

Alcohol consumption problems. Pulmonary disorders. This material or its **Aggravated Conditions:**

emissions may cause an allergic or sensitization reaction and thereby aggravate

systemic disease.

This product or one of its ingredients present 0.1% or more is NOT listed as a **Carcinogenicity Comment:**

carcinogen or suspected carcinogen by NTP, IARC, or OSHA. Carcinogenic: Category 3 NOTE: May react with nitrosating agents during rubber vulcanization to

form nitrosamines. Some nitrosamines are suspect human carcinogens. Decomposition products and fumes from vulcanization and cross-linking may

cause eye, skin and respiratory sensitization. May be a skin sensitizer.

Practically non-irritating. **Primary Irritation Effect:**

Carcinogenicity: **Genotoxicity:**

Negative in the Ames test on bacteria cells. Negative for genetic activity - in vitro tests.

Reproductive/Developmental

Toxicity:

Other:

Inhalation:

Not Determined. Similar compounds show no effects in animal studies.

ECOLOGICAL INFORMATION 12.

Acute Fish Toxicity:

Acute Crustaceans Toxicity:

Acute Algae Toxicity:

Octanol/Water Coefficient:

Chemical Fate Information: Other Information:

96Hr EC50 Zebra Fish: >10 mg/l.

Not determined. Similar compounds show at least moderate toxicity to daphnids.

Not determined. Similar compounds are at least moderately toxic to algae.

Not Determined.

Not determined. Similar compounds show low to moderate biodegradability. Similar compounds exhibit at least moderate toxicity to aquatic species.

DISPOSAL CONSIDERATIONS 13.

Disposal of Waste Method:

This product, if disposed as received, is a non-hazardous waste. Bury in a licensed landfill or burn in an approved incinerator according to federal, state, and local regulations. Federal, state and local disposal laws and regulations will determine the proper waste disposal/recycling/reclamation procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected.

Contaminated Packaging:

If empty container retains product residues, all label precautions must be observed. Transport with all closures in place. Return for reuse or dispose according to national or local regulations. Do NOT reuse container. Dispose of container according to national or local regulations.

TRANSPORT INFORMATION

DOT:DOT Status:

DOT Shipping Name:

DOT Reportable Quantity (lbs):

ICAO/IATA:Status: **Proper Shipping Name:**

UN/NA Number:

IMDG:Status:

Proper Shipping Name: TDG (Canada):Status:

Proper Shipping Name:

Not Regulated

NONE None

NONE None

NONE

Not Regulated

None

Not Regulated

None

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15. REGULATORY INFORMATION

Worldwide Inventory Status

TSCA (USA): Canadian DSL: Listed

Canadian NDSL:

Listed Not Applicable. Listed on the DSL.

EINECS/ELINCS (Europe):

Listed

Japanese Inventory (ENCS):

Listed Listed

Korean Chemical Inventory (ECL): Australian Chemical Inventories

Listed

(AICS):

New Zealand (NZ):

Listed

Phillipines (PICCS) Inventory:

Listed

China (CLECS):

Listed

US Regulatory Rules

SARA Section 302:

Not Applicable

SARA 311/312 Hazard Catagories:

Immediate

SARA 313 Chemical:

As "Zinc Compounds"; De Minimis concentration = 1.0%.

RCRA Status:

Not a RCRA waste.

Other Regulations:

California Proposition 65:

NONE

New Jersey Right-to-Know List:

Listed As "Zinc Compounds". NJ Substance #3012.

Pennsylvania Right to Know List:

Listed As "Zinc Compounds".

Florida Right to Know: Minnesota Right to Know: Not Applicable. Not Applicable.

MA Right to Know Law:

Listed As "Zinc Compounds".

FDA Status 21 CFR:

Regulated for Use under the following sections of 21 CFR: 177.2600 Rubber Articles Intended for Repeated Use in Food Contact. 175.105 Components of

Adhesives.

Canadian Regulations

WHMIS Hazard Class:

Not Determined.

NPRI:

Listed under the category "Zinc and Its Compounds", NPRI Part 1, ID# 246.

16. OTHER INFORMATION

Hazard Rating Systems:

HMIS Classification:

HEALTH 2, FLAMMABILITY 1, REACTIVITY 0

NFPA Rating:

HEALTH 1, FLAMMABILITY 1, REACTIVITY 0

The following has been revised since the last issue of this MSDS:

Addition of USA State-specific Right-to-Know information. Add environmental information.

Additional Information:

"Zinc Compounds" are included on the Connecticut, California, Michigan and Illinois Hazardous Materials Lists (USA). "Zinc Compounds" are also regulated as a Clean Water

Act regulated substance [USA].

Important Note:

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if

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this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

END OF MSDS

