



Safety Data Sheet (SDS)

Revision / Review Date: 4/3/14

1. Chemical Product and Company Identification

Product Name: ZBEC
Distributed By: HB Chemical
1665 Enterprise Parkway
Twinsburg Oh 44087
Phone - 330-920-8023
MSDS Prepared By (w Suppliers Input): HB Chemical
Chemical Name / Family: Zinc bis (dibenzylthiocarbamate)
CAS No. 14726-36-4
REACH Not Available
Product Use: Rubber Accelerator
OSHA Status Hazardous

For emergency health, safety, and environmental information, calls 330-920-8023
For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

2. Hazard(s) Identification

Classification:

The substance is classified as following according to 67/548/EEC and REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008

Hazard classes/Hazard categorie	Hazard statement
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

For full text of H- phrases: see section 2.2.

67/548/EEC

Hazards characteristics	R-Phrases
N	R50-53

Hazard Pictograms:



Signal Word(S): Warning
Hazard Statement: H410: Very toxic to aquatic life with long lasting effects.
Precautionary statement: Avoid release to the environment.

Other hazards:

Collect spillage.
Dispose of contents/container to local/regional/national/ international regulation.
Not available.

3. Composition / Information on Ingredients

Substance/Mixture:

Substance

Ingredient(s):

Chemical Name	Registration No .	CAS No.	EC No.	Concentration
Zinc bis (dibenzylthiocarbamate)	N/A	14726-36-4	238-778-0	97%

4. First Aid Measures

Inhalation:

Remove from Exposure and move to fresh air immediately. If Not breathing, give artificial respiration. If breathing is difficult, give Oxygen. Seek medical attention if irritation develops or and persists.

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes. Occasionally lifting the upper and lower eyelids. Get Medical attention if irritation occurs.

Skin:

immediately wash skin with soap and copious amounts of water. While removing contaminated clothing and shoes. Be Particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation develops and persists, seek medical attention.

Ingestion:

Rinse mouth, give water to drink.

Most important symptoms and effects, both Acute and delayed:

The product is not classified as harmful to human health effect.

Indication of any immediate medical attention And special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

5. Fire-Fighting Measures

Suitable Extinguishing Media:

Carbon dioxide, appropriate foam or dry chemical, waterspray, water mist.

Unsuitable extinguishing media:

Water Jet.

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and protective gloves.

Hazardous Combustion Products:

Emits toxic fumes under fire conditions: Carbon monoxide (CO) Sulfur oxides(Sox), nitrous gases (NOx).

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Remove ignition sources. Provide adequate ventilation. Avoid inhalation of vapour or dust. Avoid skin and eye contact. Wear protective gloves/protective clothing/eye protection/face protection.

For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

Environmental Precautions: Avoid disposing into drainage/sewer system or directly into the Aquatic environment.

Methods for Containment and Cleaning up: Pick up and arrange disposal without creating dust. Clean up affected area. Collect as much as possible in a clean container for (preferable) reuse or disposal.

Reference to other sections: See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment. See Section 13 for information on disposal.

Additional information: Not applicable.

7. Handling and Storage:

Precautions for safe handling:

Protective measures: The usual precautions for handling chemicals should be observed. Avoid dust accumulation. Dust/air mixtures may ignite violently upon exposure to sparks or sources of ignition.

Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry and well ventilated place.

Specific end use(s): Rubber accelerator.

8. Exposure Controls / Personal Protection

Control parameters:

Occupational exposure limits: WEL-TWA: 4 mg/m³ (respirable dust)
OES-TWA: 10.0 mg/m³ (inhalable dust)
OES-TWA: 4.0 mg/m³ (respirable dust)

Additional exposure limits under the conditions of use: Not available.

DNEL/DMEL and PNEC-Values: Not available.

Exposure controls:

Appropriate engineering controls:

Avoid dust generation. Ensure good ventilation and local exhaustion of the working area.

Protective Gloves:

Wear appropriate gloves to prevent skin exposure.

Eye Protection:

Wear chemical splash goggles.

Skin and Body Protection:

Wear suitable protective clothing to prevent skin exposure.
Wear suitable protective clothing to prevent heat.

Respiratory protection:

The usual precautions for handling chemicals should be observed. No specific recommendations.

Environmental exposure controls:

Avoid discharge into the environment. According to local regulation, federal and official regulations.

9. Physical and Chemical Properties

Appearance:

Powder; granules

Colour:

White, light cream

Odour:

Characteristic

Odour threshold:

Not available

pH:

Not available

Melting point/range (°C):

Min. 178 °C

Boiling point/range (°C):

Not available

Flash point (°C):

Not available

Evaporation rate:

Not available

Flammability limit - lower (%):

Not available

Flammability (solid, gas):

Non-flammable

Ignition temperature (°C):

480°C

Upper/lower flammability/explosive limits: Lower:

40 g/m³

Vapour pressure (20°C):

Negligible at room temperatures

Vapour density:

1420 kg/m³

Relative Density:

Not available

Bulk density (kg/m³):

210-250 kg/m³

Water solubility (g/l):

Practically insoluble

n-Octanol/Water (log Po/w):	Not available
<u>Auto-ignition temperature:</u>	Not available
<u>Decomposition temperature:</u>	Not available
<u>Viscosity, dynamic (mPa.s):</u>	Not available
<u>Explosive properties:</u>	Not explosive
<u>Oxidising properties:</u>	Not oxidising
<u>Molecular Formula:</u>	C30H28N2S4Zn
<u>Molecular Weight:</u>	610.21
<u>Other information:</u>	Fat solubility(solvent– oil to be specified)etc: Not available Surface tension: Not available Dissociation constant in water(pKa): Not available Oxidation-reduction Potential: Not available Specific gravity: Not available

10. Stability and Reactivity

<u>Reactivity/Stability:</u>	The substance is stable under normal storage and handling conditions. Stable at room temperature in closed containers under normal storage and handling conditions.
<u>Possibility of hazardous reactions:</u>	No dangerous reactions known.
<u>Incompatibility (Materials to Avoid):</u>	No specific recommendations.
<u>Conditions to Avoid:</u>	Incompatible materials.
<u>Hazardous decomposition products:</u>	Carbon monoxide (CO), sulfur oxides (Sox), nitrous gases (NOx)

11. Toxicological Information

Toxicokinetics, metabolism and distribution:

<u>Non-human toxicological data:</u>	Not available
<u>Information on toxicological effects:</u>	
<u>Acute toxicity:</u>	LD50(Oral, Rat): > 5000 mg/kg bw LD50(Dermal, Rabbit): Not available LC50(Inhalation, Rat): Not available
<u>Skin corrosion/Irritation:</u>	Not classified
<u>Serious eye damage/irritation:</u>	Not classified

<u>Respiratory or skin sensitization:</u>	Not classified
<u>Germ cell mutagenicity:</u>	Not classified
<u>Carcinogenicity:</u>	Not classified
<u>Reproductive toxicity:</u>	Not classified
<u>STOT- single exposure:</u>	Not classified
<u>STOT-repeated exposure:</u>	Not classified

12. Ecological Information

Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	>10 mg/l	96h	Fish	OECD 203	N/A	N/A
LC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

Results of PBT&vPvB assessment: Not available.

Other adverse effects: Not available.

13. Disposal Considerations

Waste treatment methods:

The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

Product/packaging disposal:

If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national and local regulations.

14. Transport Information

D.O.T. Shipping Name

UN Number: 3077
 UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.,(Zinc bis(dibenzylidithiocarbamate))
 Class: 9 Packaging group: III Environmental hazards: Yes

Air - ICAO (international Civil Aviation Organization)

UN Number: 3077
 UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.,(Zinc bis(dibenzylidithiocarbamate))
 Class: 9 Packaging group: III Environmental hazards: Yes

Sea - IMDG (International Maritime Dangerous Goods) UN Number: 3077
UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, SOLID, N.O.S.,(Zinc dis(dibenzylidithiocarbamate))
Class: 9 Packaging group: III Environmental hazards: Yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: IBC08

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

Relevant information regarding authorization: Not applicable.

authorization:

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

Chemical Safety Assessment has been carried out? YES

NO

16. Other Information

The above information has been compiled from what we believe to be credible sources. To our knowledge the information is accurate and reliable, however, it is not guaranteed. Any recommendations issued by HB Chemical personnel or literature is derived from experience and by no means should be taken as fact or construed as a recommendation to violate of any law, regulation or patent. It is the users responsibility to determine the suitability of any HB supplied material in their application. The individual conditions of each customer are well outside of our control and we cannot be held liable for its functionality and use. Please contact our office should you need specific information beyond what is supplied above. As with all Chemical usage safety precautions beyond the stated are highly recommended.