

MATERIAL SAFETY DATA SHEET

: According to EC-directive 2001/58/EC

Rubber Accelerator ZEPC(PX)

HS Code: 29302000.90

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product label name	Zinc N-ethyl-dithiocarbamate
Supplier	Qingdao YLSCH Industry&Trade Co.,Ltd Room 501,2-3 Unit. No.8,Zhengzhou Road, Qingdao,China. TEL: +86 18661665800
Emergency telephone	TEL: +86 18661665800
Intended use	Rubber Vulcanization Accelerator

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	乙基苯基二硫代氨基甲酸锌 Zinc N-ethyl-dithiocarbamate
CAS NO.	14634-93-6
Chemical description	White powder
TSCA NO.	none
EINECS NO.	none
Other information	$C_{18}H_{20}N_2S_4Zn$

3. HAZARDS IDENTIFICATION

Repeated contact may cause skin sensitization. Very toxic to aquatic organisms, May cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Symptoms and effects	Dust may be irritating to the respiratory tract and cause symptoms of bronchitis. Repeated contact may cause skin sensitization.
First aid	
General	In all cases of doubt, or when symptoms persist, seek medical attention.



Inhalation	Move to fresh air. If symptoms persist, seek medical advice.
Skin	Remove all contaminated clothing immediately. Wash off with plenty of soap and water. Seek medical advice if irritation develops. Launder clothes before reuse.
Eye	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to Ensure thorough rinsing. Seek medical advice if irritation develops.
Ingestion	Rinse mouth, give water to drink.
Advice to physician	No specific recommendations.

5. FIRE-FIGHTING MEASURES

Extinguishing media	Waterspray, water mist, foam, dry chemical powder, CO ₂
Unsuitable extinguishing media	Waterjet.
Special exposure hazards	Emits toxic fumes under fire conditions.
Hazardous decomposition/ Combustion products	Carbon monoxide (CO), Sulfur oxides (SO _x), nitrous gases (NO _x).
Protective equipment	Wear self contained breathing apparatus.
Other information	Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	For personal protection see Section 8. Avoid dust generation.
Environmental precautions	Avoid discharge into the environment. Collect as much as possible in a clean container for
Methods for cleaning up	(preferable) reuse or disposal.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin. Avoid dust generation.
Fire and explosion prevention	No specific recommendations.
Storage requirements	Store in a dry and cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	Avoid dust generation.Ensure good ventilation and local exhaustion of the working area.
Exposure limits	
Name: Zinc N-ethyl-dithiocarbamate	OES-TWA 5.0 mg/m ³
Personal protection	



Respiratory	Avoid breathing dust. In case of insufficient ventilation,wear suitable respiratory equipment.
Hand	Wear suitable gloves.
Eye	Wear safety goggles.
Skin and body	Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White powder	Colour	White
Odour	Odorless	Boiling point	----
Melting point\geq	200 $^{\circ}$ C	Flash point	----
Flammability	----	Explosion limits	----
Explosive properties		Auto ignition temperature	----
Oxidizing properties	----	Vapour pressure	----
Density	1.50g/cm ³	Bulk density	----
Solubility in water	Insoluble in water	Solubility in other solvents	Alcohol,Benzene
pH value	----	Partition coefficient	----
Residues (150um)% Max	0.1(Max)	Relative vapour density	----
Viscosity	----	Assay content % \geq	96
Insoluble in methanol%	----	Zinc content %	13-15

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage and handling conditions (see section 7).
Conditions to avoid	No specific recommendations
Materials to avoid	Oxidizing agents. strong acid.
Hazardous decomposition products	No hazardous decomposition products know.

11. TOXICOLOGICAL INFORMATION

Name	Zinc N-ethyl-dithiocarbamate
Acute toxicity	
Oral LG50	rat: 2590-3530 mg/kg. rabbit: 570 mg/kg.
Dermal LD50	rabbit: >3160 mg/kg. rat: >2000 mg/kg.
Irritation	
Skin	Practically non-irritating.
Eye	Severely irritating.

12. ECOLOGICAL INFORMATION

Name	Zinc N-ethyl-dithiocarbamate
Ecotoxicity	
Fish	96h-LC50 (Oncorhynchus mykiss): 0.23 mg/l. 96h-LC50 ((Lepomis macrochirus): 0.40 mg/l. 96h-LC50 (Pimephales promelas): 0.26 mg/l.
Daphnia	48h-EC50 (Daphnia magna): 0.24-0.44 mg/l.
Algae	96h-IC50 (Chlorella pyrenoidosa): 1.1 mg/l.
Degradation Biotic	Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Product	Avoid discharge into the environment Small quantities: According to local regulations. Large quantities: Consult YLSCH Chemical for special advice.
Contaminated packaging	According to local regulations. Waste code number: Please refer to your specific industry
Other information	in the European Waste Catalogue.

14. TRANSPORT INFORMATION

Land transport (ADR/ RID)			
ADR class	9	RID class	9
ADR/RID packing group	----	Hazard Identification No.	90
Substance Identification No.	3077	UN number	3077
	Environmentally hazardous substance, solid, n.o.s.		
Proper Shipping Name	(Zinc N-ethyl-dithiocarbamate)		
Sea transport (IMDG-code/ IMO)			
Correct technical name	----	IMDG Class	
UN Number	----	Packaging group	
EMS Number	----		
Air transport (ICAO-TI/ IATA-DGR)			
ICAO-TI/IATA-DGR Class	9	UN number	3077
Packing group	Environmentally hazardous substance, solid, n.o.s.		
Correct technical name	(Zinc N-ethyl-dithiocarbamate)		

15. REGULATORY INFORMATION

Chemical description	Zinc N-ethyl-dithiocarbamate
Labelling according to EC directives	
EC-number	See section 2
Classification based on	Annex-1 to directive 67/548/EEC
R(isk) phrase(s)	R 43 May cause sensitization by skin contact May cause long-term adverse effects in the aquatic environment
S(afety) phrase(s)	S 24 Avoid contact with skin S 37 Wear suitable gloves S 60 This material and its container must be disposed of as hazardous waste S 61 Avoid release to the environment. Refer to special instruction /Safety data sheets
Other information	To be displayed on the label: "EC label".
Wassergefährdungsklasse (WGK)	2 (VwVwS Anhang 3, Nr. 6605)

16. OTHER INFORMATION

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.
