

PERKACIT ZBEC pdr and pdr-d

1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND THE COMPANY / UNDERTAKING

Product label name	Zinc dibenzylidithiocarbamate
Supplier / manufacturer	Performance Additives Italy S.p.A. Zona Industriale "A" 86039 Termoli (CB) Italy Tel. +39 0875 58941
Emergency Telephone	+49 40 30 299 - 0 (only during office hours, Behn Meyer Europe GmbH, Ballindamm 1, D-20095 Hamburg)
Intended use	Vulcanization accelerator

2. COMPOSITION / INFORMATION ON INGREDIENTS

This product is to be considered as a substance in conformance to EC directives.
Information on hazardous ingredients

Chemical description Zinc dibenzylidithiocarbamate

Composition / information on ingredients

Number	% w/w	CAS-Number	Chemical name		
Number	EC-number	Annex-1 number	Symbols (EU Classification)		Risk-phrases
1	> 95	14726-36-4	Zinc dibenzylidithiocarbamate		
1	238-778-0		N		R50/53
		GHS classification	Hazard classes		



Aquatic environment, acute 1,
Aquatic environment, chronic 1 H400, H410

Other Information Formula: C₃₀H₂₈N₂S₄Zn.

3. HAZARDS IDENTIFICATION

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. May cause alcohol intolerance.
First aid	
General	Do not drink alcohol after exposure.
Inhalation	Move to fresh air. If symptoms persist, seek medical advice.
Skin	Wash immediately with soap and water.
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.

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5. FIRE-FIGHTING MEASURES

Extinguishing media	Waterspray, water mist, foam, dry chemical powder.
Unsuitable extinguishing media	Water jet.
Special exposure hazards	None known.
Hazardous decomposition / combustion products	Emits toxic fumes under fire conditions: hydrogen cyanide (HCN), sulphur dioxide (SO ₂), 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	Do not flush into public water courses.
Methods for cleaning up	Collect as much as possible in a clean container for (preferable) reuse or disposal.

7. HANDLING AND STORAGE

Handling	The usual precautions for handling chemicals should be observed.
Fire and explosion prevention	Avoid dust accumulation. Dust/air mixtures may ignite violently upon exposure to sparks or sources of ignition. Kst: 168 bar.m/s. Maximum corrected explosion pressure: 7.0 bar.
Storage requirements	Store in a dry and cool place.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering controls	Avoid dust generation. Ensure good ventilation and local exhaustion of the working area.
Exposure limits	
Name	
Zinc dibenzylthiocarbamate	WEL (TWA): 4 mg/m ³ (respirable dust) OES-TWA: 10.0 mg/m ³ (inhalable dust) OES-TWA: 4.0 mg/m ³ (respirable dust)
Personal protection	
Respiratory	No specific recommendations.
Hand	No specific recommendations.
Eye	No specific recommendations.
Skin	No specific recommendations.
Other Information	The usual precautions for handling chemicals should be observed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dedusted powder, powder, granules
Colour	white, light cream
Odour	characteristic
Boiling point / range	not determined
Melting point / range	min. 178 °C
Flash point	not determined
Flammability	not determined
Autoignition temperature	480 °C
Explosive properties	dust explosion hazard

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Explosion limits	Lower Explosion Limit (LEL): 40 g/m ³ . Minimum ignition energy: =< 3 mJ.
Oxidising properties	not applicable
Vapour pressure	negligible at room temperatures
Density	1420 kg/m ³ (20 °C)
Bulk density	210-250 kg/m ³
Solubility in water	practically insoluble
Solubility in other solvents	acetone, chlorinated hydrocarbons
pH value	not determined
Partition coefficient	not determined
n-octanol / water	
Relative vapour density (air=1)	not applicable
Viscosity	not relevant

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Name	Zinc dibenzylidithiocarbamate
Acute toxicity	
Oral LD50	rat: > 5000 mg/kg.
Irritation	
Skin	practically non-irritating
Eye	practically non irritating
Genotoxicity	not mutagenic (Ames test)

12. ECOLOGICAL INFORMATION

Name	Zinc dibenzylidithiocarbamate
Ecotoxicity	
Fish	96h-LC50 (Danio rerio): >10 mg/l.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

Land transport			
ADR class	9	ADR / RID packing group	III
RID class	9	Substance Identification No.	3077
Hazard Identification No.	90	UN number	3077
TREM-Card	http://www.unece.		

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	org/trans/danger/ publi/adr/adr_ling uistic_e.htm
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (zinc dibenzylidithiocarbamate) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc dibenzylidithiocarbamate)
Sea transport (IMDG-code / IMO)	
IMO / IMDG code	Class 9
Packing group III	UN number 3077
EMS F-A, S-F	Subsidiary Risk
Marine pollutant yes	
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (zinc dibenzylidithiocarbamate)
Air transport (ICAO-TI / IATA-DGR)	
ICAO-TI/IATA-DGR	UN number 3077
Class 9	Packing group III
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (zinc dibenzylidithiocarbamate)

15. REGULATORY INFORMATION

Chemical description Zinc dibenzylidithiocarbamate

Labelling according to EC directives

EC-number see section 3

Classification based on Tests



Symbols (EU classification)	DANGEROUS FOR THE ENVIRONMENT (N)
R(isk) phrases (EU classification)	R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
S(afety) phrases (EU classification)	S 60 This material and its container must be disposed of as hazardous waste S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets
Other information	GHS classification Pictogram(s) GHS09 Signal words & Hazard statements: WARNING H410: Very toxic to aquatic life with long lasting effects. Precautionary statements: P273: Avoid release to the environment. P391: Collect spillage. (??to be removed??) P501: Dispose of contents/container to a hazardous waste facility in accordance with local/national regulation.
German Water Hazard Class (WGK)	2 (VwVwS Anhang 3, Nr. 6623)

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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.

R-pharse information

Chemical name

Zinc dibenzylidithiocarbamate

Risk-phrases

R50/53

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

H400, H410

History

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