

Preparation Date no data available

Revision date 05-22-2015

Revision number 1

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product name Dimacit ZDMC OT

Other means of identification

Product code 51038
UN-No UN2771
Synonyms Zinc Dimethyldithiocarbamate

Recommended use of the chemical and restrictions on use

Recommended use rubber accelerator.
Uses advised against No information available

Details of the Supplier of the Safety Data Sheet

Supplier Address

Taminco US Inc.
 A subsidiary of Eastman Chemical Company
 Two Windsor Plaza, Suite 411
 7540 Windsor Drive
 Allentown, PA USA 18195
 T: +(800) 223-3258

Emergency telephone number

Emergency Telephone

In case of emergency call CHEMTREC 1-800-424-9300
 for International calls 1-703-527-3887

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Label Elements

Symbols/Pictograms



Signal Word
DANGER**hazard statements**

Fatal if inhaled
 Toxic if swallowed
 Causes serious eye damage
 May cause an allergic skin reaction
 May cause respiratory irritation
 May cause damage to organs through prolonged or repeated exposure
 May form combustible dust concentrations in air

Precautionary Statement - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 In case of inadequate ventilation wear respiratory protection
 Wear protective gloves/protective clothing/eye protection/face protection
 Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

Get medical advice/attention if you feel unwell
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 IF ON SKIN: Gently wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Rinse mouth
 Collect spillage

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local regulation

Hazards Not Otherwise Classified (HNOC)

Not Applicable

3. Composition/information on Ingredients

Synonyms Zinc Dimethyldithiocarbamate.

Chemical name	CAS-No	Weight %	Trade secret
Ziram	137-30-4	>92	No

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures**First Aid Measures**

General advice	If symptoms persist, call a physician. Show this material safety data sheet to the doctor in attendance. Treat symptomatically. Use of alcoholic beverages may enhance toxic effects. antabuse effect. In case of allergic reaction after exposure, any future exposure must be avoided.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Obtain medical attention.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Thoroughly clean shoes before reuse. If skin irritation persists, call a physician.
Inhalation	Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. Immediate medical attention is required.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Treat symptomatically. If swallowed, seek medical advice immediately and show this container or label. Loosen tight clothing such as collar, tie, belt and waistband.
Protection of First-aiders	Use personal protective equipment.

Most Important Symptoms and Effects, Both Acute and Delayed

May be fatal if inhaled in large quantities. Toxic if swallowed. Serious eye damage/eye irritation. Irritating to respiratory system. May cause sensitization by skin contact. Dermal absorption possible. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Indication of Any Immediate Medical Attention and Special Treatment Needed

General advice for dithiocarbamates. Biomonitoring possible at chronical exposure: determination of TTCA in the urine at the end of the workday/week. Bloodtesting for delayed effects: liver tests, kidney function, thyroid function.

5. Fire-fighting measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

No information available.

Specific hazards arising from the chemical

Danger of dust explosions. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous combustion products Carbon oxides. Carbon monoxide. Nitrogen oxides (NOx). sulphur oxides. sulphides.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Wear respiratory protection. Wear suitable protective clothing, gloves and eye/face protection. Avoid dust formation. Remove all sources of ignition.

Environmental Precautions

Remove immediately adhering matter. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid dust formation. Do not flush with water. Use a suitable vacuum cleaner. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

7. Handling and Storage

Precautions for Safe Handling

Use only in area provided with appropriate exhaust ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not breathe vapours/dust. Use only in an area equipped with a safety shower. Ensure that eyewash stations and safety showers are close to the workstation location. Do not eat, drink or smoke when using this product. Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool place. Do not store near acids. Do not store together with oxidizing and self-igniting products. Use spark-proof tools and explosion-proof equipment. Keep away from heat and sources of ignition. Keep away from direct sunlight.

incompatible materials Strong acids. Oxidizing agents.

8. Exposure Controls/Personal Protection

Control Parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate Engineering Controls

Local exhaust. Avoid dust formation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Tightly fitting safety goggles. Face-shield.
Skin and Body Protection	Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Respiratory protection	If irritation is experienced, NIOSH approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations	When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	solid powder	Odor	None
appearance	solid white		
color	white		

<u>Property</u>	<u>VALUES</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	

flash point	No information available
evaporation rate	No information available
flammability (solid, gas)	not auto-flammable
Flammability limit in air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapour Pressure Value	No information available
vapor density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in Other Solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	Dust can form an explosive mixture with air
Oxidizing properties	Not Applicable

OTHER INFORMATION

molecular weight	No information available
VOC Content	No information available
density	No information available

10. Stability and Reactivity**Reactivity**

See Incompatible Materials

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Possibility of hazardous reactions. See Incompatible Materials.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Avoid dust formation. Keep away from heat and sources of ignition. Take precautionary measures against static discharges.

incompatible materials

Strong acids. Oxidizing agents.

Hazardous decomposition products

Heating or fire can release toxic gas. Carbon oxides. Nitrogen oxides (NOx). Sulphur oxides.

11. Toxicological Information**Symptoms related to the physical, chemical and toxicological characteristics****Product information**

LD50/oral/rat =	267 mg/kg
LD50/dermal/rat =	> 2000 mg/kg
LC50/inhalation/4h/rat =	0.06 mg/l
Eye irritation	corrosive, Risk of serious damage to eyes
Skin irritation	rabbits, Non-irritating to the skin

sensitization	The results of a test on guinea pigs showed this substance to be a weak skin sensitizer
Mutagenic effects	Did not show mutagenic effects in animal experiments
Reproductive Toxicity	No toxicity to reproduction
Carcinogenic effects	Did not show carcinogenic effects in animal experiments
Specific target organ systemic toxicity (single exposure)	No information available
Specific target organ systemic toxicity (repeated exposure)	No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Ziram 137-30-4	-	Group 3	-	-

Target organ effects kidney, liver, stomach, Thyroid, Adrenal gland, Nervous System, Muscle.

12. Ecological Information

Ecotoxicity

Product information

Toxicity to Fish	LC50 : 0.0097 - 1.70 mg/l
EC50/48h/daphnia =	0.048 mg/l
EC50/120h/algae =	0.066 mg/l
Toxicity to bacteria	IC50 : 19.20 mg/l

Chemical name	Freshwater Algae	Freshwater Fish	Water Flea
Ziram 137-30-4	1.2: 96 h Chlorella pyrenoidosa mg/L EC50 static	0.008 - 0.011: 96 h Lepomis macrochirus mg/L LC50 flow-through 1.2: 96 h Lepomis macrochirus mg/L LC50 static 1.5 - 2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.7: 96 h Oncorhynchus mykiss mg/L LC50 static 2.1 - 2.5: 96 h Cyprinus carpio mg/L LC50 semi-static 0.008: 96 h Pimephales promelas mg/L LC50 0.008: 96 h Pimephales promelas mg/L LC50 static 0.56 - 1: 96 h Poecilia reticulata mg/L LC50 semi-static	0.034 - 0.068: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Degradation half life. after <2 days.

Bioaccumulative potential

Mobility in Soil

minimum

Chemical name	Log Pow
Ziram 137-30-4	1.086

Other Adverse Effects None known based on information supplied

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method Dispose of in accordance with local regulations. Waste codes should be assigned by the user based on the application for which the product was used. Classified as hazardous waste according to national equivalent of EC-Dir. 91/689; disposal of toxic and hazardous waste.

Contaminated packaging Empty containers should be taken for local recycling, recovery or waste disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Ziram 137-30-4	waste number P205	-	-	-

14. Transport Information

DOT

UN-No UN2771
Proper shipping name UN2771, Thiocarbamate pesticide, solid, toxic (Ziram), 6.1, PG II, RQ
Hazard class 6.1
Packing group PGII
Reportable Quantity (RQ) 10.2 lbs.

IATA

UN-No UN2771
Proper shipping name 2771 - Thiocarbamate pesticide, solid, toxic (ziram)
Hazard class 6.1
Packing group II
Marine pollutant yes

IMDG/IMO

UN-No UN2771
Proper shipping name 2771 - Thiocarbamate pesticide, solid, toxic (ziram)
Hazard class 6.1
Packing group II
Marine pollutant yes

15. Regulatory Information

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA TITLE III SECTION 313 INFORMATION:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazardous**Categorization**

Acute health hazard	Yes
Chronic health hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	RQ	CERCLA/SARA RQ	RQ
Ziram 137-30-4	10 lbs	-	RQ= 0.454kg statutory RQ RQ= 1lb statutory RQ RQ= 1000lb final RQ RQ= 454kg final RQ

State Regulations**California Proposition 65**

No Data Available

State Right-to-Know

Chemical name	NJ	Ma	Pa
Ziram 137-30-4	X	X	Not Listed

U.S. EPA Label information

EPA Pesticide registration number Not Applicable

WHMIS Hazard Class

D1A Very toxic materials

CANADA

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other Information

NFPA	HEALTH 3	FIRE 1	Instability 0	Physical hazard -
HMIS	HEALTH 3	flammability 1	Physical hazards 0	

Revision date 05-22-2015

Revision Summary

Not Available

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet