MegaChem Limited
11, Tuas Link 1 Singapore 638588
Tel +65 6933 9999
Fax +65 6863 2818, 6863 1572
enquiry@sg.megachem.com
GST Regn.No.: M2-0081977-2
Company Regn.No.: 198803293M
www.megachem.com

SAFETY DATA SHEET

Update : 5 Januari 2021

1. Identification of subtances and manufacturer

Product Name	:	Zinc
Trade name		ZINC DUST
CAS No.		7440-66-6
Recommended use	:	Industrial
Chemical Formula	:	Zn
Phyisical form of product	:	Powder
Company details	:	MEGACHEM LTD 11, Tuas Link 1, Singapore 638588
Emergency contact details	:	Please contact (+65 6933 9999)

2. Hazard Identification

2.1 Classification of the substances or mixture : Acute Aquatic Hazard - catagory 1

Long-Term Aquatic Hazard - Catagory 1

2.2 GHS Label element

Hazard pictogram :

Signal word	:	Warning
Hazard statements	:	Very toxic to aquatic life with long lasting effects
Precautionary statements		
Prevention	:	Avoid release to the environment
Response		Collect spillage
Storage		Not Applicable
Disposal		national and international regulation

3. Composition/Information on ingredients

Synonyms	:	Zinc, Zinc Dust
Formula	:	Zn
Molecural weight	:	65.39 g/mol
CAS-No	:	7440 - 66 - 6
EINECS No.	:	67/548/EEC

4. First aid measures

*	General Advice	:	Consult a physician. Show this SDS to the doctor.
*	In case of skin contact	:	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation occurs.
*	If inhaled	:	If inhaled, remove to fresh air. If breathing is difficult, give Oxygen. If not breathing, give artificial respiration. Get medical attention.
*	In case of eye contact	:	Wash with water and induce vomiting by touching throat inside. Rinse and flush mouth and throat with clean water.
*	If swallowed	:	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately

5. Fire-fighting measures – emergency

*	Suitable extinguishing media	:	Dry Chemical, CO2 or Sand
*	General hazard	:	No specific hazard. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
*	Unusual fire/explosion hazards	:	May present an explosion hazard when material is suspended in air in confined areas or quipment and subjected to spark, heat or flame.
*	Precautions for fire-fighters		Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

6.1	Personal precautions	:	Use respirator protective. Use vacuum or absorbent if available. Avoid generation and spreading of dust. If wet Zinc dust are transferred in an open container and placed on a well ventilated place.
6.2	Method for containment and cleaning up	:	up If emergency personnel are unavailable, vacuum or carefully scoop up spilled material and place in an appropriate container for disposal. Avoid creating dusty conditions and prevent wind dispersal.
6,3	Environmental precautions	:	Avoid dispersal of spilled material and run-off and contact with soil, waterways, drains and sewers.

7. Handling and storage

7.1	General	:	Keep away from heat, sparks and open flame. Container must be kept tightly closed. Do not use water because of hydrogen gas evolution. Keep away from moisture as react to form oxide. Avoid contact with halogen substituted hydrocarbon or alkaline metal hydride. This product will oxidise slowly if exposed to air, and fire might occur because of exothermic reaction.
7.2	Precautions in handling & storage	:	Store in warehouse, avoid contact with flame and water. Keep below 40˚C at a cool, dry and ventilated storage and closed containers/pails.

8. Exposure control/personal protection

8,1	Control parameters	:	Components with workplace control parameters
8,2	Exposure controls		
	Skin protection	:	Personal protective equipments for the body should be selected based on the task being performed and the risks involved and should be approved by as specialist before handling this product.
	Eye Protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
	Respiratory protection	:	Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirators selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
	Occupational exposure controls	:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to air borne contaminants below the exposure limit.
	Hygiene measures	:	Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

9. 9. Physical and chemical properties

Physical state	:	Solid powder
Appearance	:	Grey-white powder
Odour/taste	:	Odourless
Boiling point	:	907˚C
Melting point	:	419,5˚C
Specific gravity	:	7.1 gm/cm3 at 20ºC
Flash point	:	Data not available

10. Stability and reactivity

10,1	Hazardous reactions	:	Stable product.
10,2	Incompatible materials and conditions to avoid	:	Acids, Strong bases, chlorides, Fluorine, Nitrates, Carbon disulfide. Reactive with oxidizing agents, acids, Slightly reactive with alkalis. Use explosion proof electrical equipments. Keep area clean and tidy. Avoid producing air borne dust when handling and avoid all possible sources of ignition. Keep container dry.

11. Toxicological information

11,1	Rat dermal LD50	:	>2000mg/Kg
	Rat inhalation LC50 (4 hrs)	:	>5700 mg/m3
	Rat oral LD50 (mg/kg)	:	>2000 mg/Kg
	Human oral LDLo	:	500 mg/kg
	Mouse oral LD50	:	7950 mg/Kg
	Carcinogenicity	:	No known significant effects or critical hazards Classified A4 (No classifiable for human or animal) by ACGIH [Zinc Oxide]
	Mutagenicity	:	No known significant effects or critical hazards.
	Reproductive toxicity	:	No known significant effects or critical hazards.
	Potential health effects		
	Inhalation	:	May be harmful if inhaled. May cause respiratory tract irritation.
	Ingestion	:	May be harmful if swallowed.
	Skin	:	May be harmful if absorbed through skin. May cause skin irritation.
	Eyes	:	May cause eye irritation.

12. Ecological information

	Ecological effects information	:	Prevent entry to sewers, soils and natural waters.
	Hazards to fish	:	No information
	Accumulated toxicity	:	No information

13. Disposal considerations

13,1	Disposal	:	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
13,2	Method of Disposal	:	The generation of waste should be avoided or minimized where ever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewer. Disposal of this product, solution and any by-product should at all times comply with requirement of environmental protect ion and waste disposal legislation and any regional local authority requirements. This product is recyclable. Consideration of disposal via this route should be given.

14. Transport information

14,1	General:		Keep away from water and avoid bag's tear as the material is slightly hygroscopic. Adjust temperature below 40°C during transportation and loading/unloading.
14,2	Labeling ADR / RID class		
	UN No	:	3077
	IMDG Class	:	Not Regulated
	IATA / DGR Class	:	Not Regulated
14,3	Transport classification:	:	Not classified as dangerous for transport purposes. IMCO Code class 4.1, 4.2,4.3. RID/ADR – Zinc Dust is not classified as dangerous goods.

This includes: Road, rail, sea and air transport.

15. Regulatory information

EEC (EINECS) No.	:	67/548/EEC
Pictogram Label	:	
Risk phases	:	R 50/53 – very toxic to aquatic life, may cause long lasting harmful effects to aquatic life
Safety phrases	:	S60 - This material must be disposed of as hazardous waste S61- Avoid release to the environment.

16. Other information

Product information	:	Registry Toxic number (RTECS/NIOSH)
Risk Phrases	:	R50 corresponds to H400 with hazard statement as “very toxic to aquatic life” R53 corresponds to H413 with hazard statement as “may cause long lasting harmful effects to aquatic life”

The information contained in this SDS is developed from what is believed to be accurate and reliable sources, but PT. Indo Lysaght makes no warranties or expressed or implied or assumes no responsibility for the accuracy or completeness of the above data.