

## XI'AN FUNCTION MATERIAL GROUP CO., LTD Material Safety Data Sheet Zinc Oxide

1. Product and Company Identification		
Trade Name:	Zinc oxide	
Chemical Formula:	ZnO	
Manufacturer/Supplier:	XI'AN FUNCTION MATERIAL GROUP CO., LTD	
Street:	No. 69, Gazelle Valley, High-Tech Zone	
City:	XI'AN	
State:	Shaanxi	
Zip Code:	710077	
Country:	China	
Tel #:	+86-29-88993870/+86-13519132051	
	2. Hazards Identification	
Signal Word:	None	
Hazard Statements:	H401: Toxic to aquatic life	
	None	
Precautionary Statements:	None	
HMIS Health Ratings (0-4): Health:	1	
HMIS Health Ratings (0-4):		
HMIS Health Ratings (0-4): Health: Flammability:	1 0	
HMIS Health Ratings (0-4): Health: Flammability: Reactivity: Chemical Family:	1 0 0 3. Composition Ceramic	
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4. First Aid Procedures		
General Treatment:	Seek medical attention if symptoms persist.	
Special Treatment:	None	
Important Symptoms:	None	
nhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.	
ingestion:	Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.	
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing.	
Eyes:	Flush eyes with water, blinking often for ten minutes.	
	5. Fire and explosion hazards data	
Flammability:	Non-flammable	
Flash Point:	N/A	
Autoignition Temperature:	N/A	
Extinguishing Media:	Use suitable extinguishing agent for surrounding material and type of fire.	
Spec Fire Fighting Procedures	Use full-face, self-contained breathing apparatus with full protective	
Spec. Fire Fighting Procedure:	clothing to prevent contact with skin and eyes.	
	6. Accidental release measures	
f Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in	
	special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal	
	Take care not to raise dust.	
Environmental Precautions:	Isolate runoff to prevent environmental pollution.	
	7. Handling and storage	
Handling Conditions:	Wash thoroughly after handling.	
Storage Conditions:	Store in a cool dry place in a tightly sealed container.	
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before	
on figure manchance.	eating and smoking. Do not blow dust off clothing or skin with compressed air.	
Ventilation:	Provide sufficient ventilation to maintain concentration at or below	
ventration.	TLV.	
	8. Exposure Controls / Personal Protection	
Permissible Exposure Limits:	5 mg/m <sup>3</sup> as ZnO respirable fraction (USA)	
Threshold Limit Value:	2 mg/m <sup>3</sup> as ZnO long-term respirable fraction (USA)	
Special Equipment:	None	
Respiratory Protection:	Dust Respirator, NIOSH approved	
Protective Gloves:	Rubber gloves	
Eye Protection:	Safety glasses / goggles	
Body Protection:	Protective work clothing. Wear close-toed shoes and long	
	sleeves/pants.	

9. Physical and Chemical Characteristics		
Color	White	
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts	
Odor:	Odorless	
Water Solubility:	Insoluble	
Boiling Point:	N/A	
Melting Point:	1975 °C	
Density:	5.61 g/cc	
Molecular weight:	81.37 g/mol	
	10. Reactivity	
Stability:	Stable under recommended storage conditions	
Reacts With:	Strong oxidizing agents	
Incompatible Conditions:	None	
Haz. Decomposition Products:	Metal oxide fume	
	11. Toxicological Information	
Potential Health Effects:		
Eyes:	May cause irritation	
Skin:	May cause irritation	
Ingestion:	Low toxicity	
Inhalation:	May cause irritation	
Details:	Zinc compounds have variable low toxicity. Zinc is not inherently a	
	toxic element. However, when heated it evolves a fume of zinc oxide	
	which, when inhaled fresh can cause a disease known as "brass	
	founders" "ague", or brass chills". Zinc dust which is not freshly	
	formed is virtually innocuous. There is no cumulative effect from the	
	inhalation of zinc fumes.	
Routes of Entry:	None	
Target Organs:	N/A	
Signs & Symptoms of Exposure:	N/A	
Medical Conditions	1.1.1.1	
	N/A	
Aggravated by Exposure:		
Median Lethal Dose:	N/A	
Carcinogen:	Inadequate information	
	12. Ecological Information	
Ecological effects:	Danger to drinking water, even in small doses. Poisonous to fish and aquatic life.	
	13. Disposal Considerations	

Dispose of in accordance with local, state and federal regulations.

Hazardous:	Hazardous for transportation as powder
Hazard Class:	9 Miscellaneous dangerous goods
Packing Group:	III
UN Number:	UN3077
Proper Shipping Name:	Environmentally hazardous substance, solid, n.o.s. (Zinc Oxide)
	15. Regulatory Information
Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	Yes

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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