

Northeastern Side Zhangjiatuan Village Liyuan Street Office Pingdu City Qingdao

Material Safety Data Sheet (MSDS)

Section 1 – Identification of the Substance / Preparation, and of the Company

1.1: Product IdentificationTrade Name:Natural Flake Graphite, GraphiteRegistration Number: /Substance Name:Graphite, CAS 7782-42-5EC Number: 231-955-3

1.2: Indentified uses of the substance or mixtures

Uses: Inorganic source of carbon, filler, thermal additive, re-carburizer, casting powders, drilling fluids, plastic additive, rubber additive, tint/pigment, lubricant, chemically resistant additive, EMF absorber, milling and sieving, bulk loading, unloading, repackaging, general inert filler-additive.

Uses Advised Against: For industrial use only. Not recommended as food or cosmetic additive.

1.3: Supplier Information

Company/Manufacturer: QINGDAO Meizhen Graphite Co.,LTD Northeastern side zhangjiatuan village Liyuan street office pingdu city qingdao <u>1.4: Emergency Telephone Number</u>: 86-0532-87328778

Section 2: Hazards Identification

2.1: Classification of substance Graphite is not a hazardous substance 2.2: Label Elements Graphite is not a hazardous substance or mixture 2.3: Other hazards



Natural graphite may contain crystalline silica, variety quartz. This substance is not admixed with the graphite, but is a naturally occurring mineral impurity that is intimately associated with the graphite. In most cases this silica is not in respirable form unless the graphite is very finely divided. IARC Monograph Vol 68, 1997 Concludes That There Is Sufficient Evidence That Inhaled Crystalline Silica Causes Cancer In Humans. IARC Classification: Group 1.

Section 3: Composition/ Information on Ingredients



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Chemical Composition: Carbon variety Graphite 99% (balance is inert mineral ash)			
CAS # 7784-4	2-5		
EC # 231-955	-3		
Molecular We	eight: 12.0		
Formula: C			
Section 4 – First Aid Measures			
Ingestion	Get immediate medical attention. Do not induce vomiting unless directed by medical personnel. Natural		
	graphite is not known to be toxic by ingestion. However, ingestion may cause digestive system blockage.		
Skin Contact	Wash with mild soap and warm water: Natural graphite is non-staining to skin		
Eye Contact	Rinse with tepid water until eyes are clear of particulates. Seek medical attention if irritation persists.		
Inhalation	Remove patient to particulate-free environment. Wear approved dust mask to avoid breathing dust.		
	Seek medical attention if irritation persists.		

Section 5 – Fire Fighting Measures

Natural Graphite is not flammable under normal conditions		
Extinguishing Media	Dry chemical extinguisher, water, sand, limestone powder	
Protective Equipment	Self contained air pack, gloves, safety goggles	
Special Hazards	cial Hazards At temperatures above 1500 C, graphite reacts with substances containing oxygen, includ	
	water and carbon dioxide. In case of intensely hot fire events, use sand to cover and isolate	
	graphite.	
NFP Rating	110	
Products of Combustion	Carbon dioxide, CO2, carbon monoxide, CO.	

Section 6 – Accidental Release Measures

Personal Precautions	Wear approved dust mask, safety goggles, and conventional work gloves Apply
Methods for Cleaning Up:	Conventional Sweep or vacuum. Avoid creating dusting conditions
Environmental Precautions:	Natural graphite is inert and insoluble and will not pose any soluble ion hazards to the environment. However, good housekeeping practices should be followed and spilled material should be cleaned up, and disposed of in an appropriate manner.
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Section 7 – Handling and Storage

Handling	Conventional means to avoid dusting conditions. Keep powder from contacting eyes.	
	Natural graphite is a good conductor of electricity. Avoid contact between natural	
	graphite and electrical circuitry.	
Slip Hazard	Graphite is a highly lubricious material and may present a slip hazard if spilled on	
	pedestrian surfaces.	
Storage and Incompatibilities	Store all carbonaceous materials in a dry location. Natural graphite is incompatible with	
	all oxidizing agents.	
Dust Explosibility Hazards	Natural graphite poses a very slight risk of dust explosion hazard: Dust class ST1, MIE	
	greater that 10 J (very low hazard of spark conflagration)	



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Section 8 – Exposure Controls/ P	Personal Protection
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Control Parameters	China or US Limits		JEN GR	
Component	CAS No	%	ACGIH TWA	Control Reference
Natural Graphite	7782-42-5	100	2.0 mg/m3	2013 ACGIH TLV Handbook
Engineering Measures	Use adequate dust coll	ection to maintain dust le	evels below the control of	prrecommended values.
Respiratory Protection	Approved dust mask, type N95 recommended.			
Eye Protection	Conventional safety glasses or goggles.			
Skin Protection	Conventional work gloves and clothing.			
Additional	Graphite spilled on pedestrian surfaces may pose a significant slip hazard.			

Section 9 – Physical and Chemical Properties

Color	Gray to Black	Material State	Solid, granular or powder
Odor	None		
Boiling Point	NA	Melting Point	Sublimates at 3652C
Specific Gravity	2.26	Vapor Density	Not applicable
Vapor Pressure (mm Hg)	NA	% Volatile (By Wt.)	0-4%
Solubility in Water	Insoluble	Evaporation Rate:	Not applicable
РН	NA	Auto Ignition	Above 500 °C
Decomposition Temp Oxi	dizes above 400C	Dust Explosion class	ST1=KST>0-200 bar m/s
Flash Point NA Solid substance with very high melting point			

Section 10 – Stability and Reactivity

Stability	Stable. Will not polymerize	
Conditions to Avoid	Avoid contact with oxidizing agents	
Materials to Avoid	terials to Avoid Oxidizing agents	
Hazardous Decomposition	Products Carbon Dioxide (CO2), Carbon Monoxide (CO)	
Flammable Limits (% by Vol.)		
LEL and UEL values not available: Minimum Ignition Energy (MIE) greater than 10 joules. When exposed to extremely high energy ignition sources very finely divided graphite powder of form explosive mixtures with air. Avoid contact between graphite dust cloud high energy ignition sources. Classified as not flammable.		

Section 11 – Toxicological Information

Toxicological information about natural graphite is not available. Natural graphite is inert, insoluble and is not expected to present an ingestion hazard.



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Section 12 – Ecological Information

Assessment	Natural graphite is inert and insoluble. To the best of our
	knowledge, natural graphite should not present any
	environmental hazards.
Persistence and degradability:	Natural graphite is a reduced form of carbon and will not
	degrade further under normal conditions. This form of
	carbon is stable, unreactive in water under ambient
	conditions, and is insoluble.
Bioaccumulation:	There is no evidence indicating that natural graphite is
	bioaccumulative.
Aquatic Toxicity:	Data not available.
Soil Mobility:	Not determined, however natural graphite is not expected
	to have mobility in soil as it is an insoluble, inorganic
	substance.
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Section 13 – Disposal Considerations

Dispose of in a manner which conforms to local, state and Federal regulations.

Provision of a European Waste Catalog, waste code number, should be handled in agreement with the regional waste disposal company.

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Packaging should be completely emptied of contents and disposed of in a manner specified by the recycler/regional disposal contractor.

Section 14 – Transport Information

ICAO / IATA		
Shipping Name	Natural Graphite, Graphite	
Hazard Class	NonHazardous	
Subsidiary Class	NA	
UN Number	NA	
Packing Group	NA	
Marine Transport	Not classified as a hazardous material	
Land Transport	Not classified as a hazardous material	
Air Transport	Not classified as a hazardous material	
Transport Label Rec	quired No label required	
Additional Transpo	rt Info Technical Name (N.O.S.): Natural Graphite	

Section 15 – Regulatory Information

Not Classified	
Inventory Information	



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EEC EINECS	#231-955-3	
US TSCA	Yes	
Canada DSL	Yes	
Canada NDSL	No	
Australian AIC	Yes	
Korean ECL	Yes WEN GRAD	
Asia PAC	Yes	
Swiss Giftliste 1	Yes #68422***	
IECSC	Yes with the second	
PICCS	Yes	
New Zealand NZLo	Yes *	
REACH: Natural graphite is exempt from REACH registration.		
RoHS: Natural graphite is compliant with the EU RoHS directive		
WEEE: Natural graphite is compliant with the EU waste electrical and electronic equipment directive		

Section 16 – Other Information

Abbreviations Used:

ACGIH TWA American Council of Government and Industrial Hygienists Time Weighted Average value. CAS Chemical Abstracts Service

- NA Not applicable
- N.O.S. Not otherwise specified