

Safety Data Sheets



Black Graphite Pbk10

Product code: PS-MI0098

Department: black dry pigments

C.A.S. : 7782-42-5

Section: 1 Identification

Product name	Natural Graphite 50-85% Carbon
Substance Name:	Graphite, CAS 7782-42-5
EC Number:	231-955-3
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.

Section: 2 Hazard Identification

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.

HGS Label Elements



Signal Word

Danger

GHS Classification

Specific target organ toxicity -repeated exposure-Cat.1

Hazard statements

Causes damage to organs through repeated exposure or prolonged exposure (H372)

Precautionary Statements

Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Get medical advice/attention if you feel unwell.

Section: 3 Composition / Information on Ingredients

Chemical Composition:	Carbon variety Graphite 50-85% (balance is inert mineral ash)
CAS #	7784-42-5
EC #	231-955-3
Molecular Weight:	12.0
Formula:	C

Section: 4 First Aid Measures

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.
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.

Section: 5 Fire Fighting Measures

extinguishing media	Dry chemical extinguisher, water, sand, limestone powder
special fire fighting procedures firefighters	Firefighters should wear self contained air pack, gloves, safety goggles.
unusual fire / explosion hazards	At temperatures above 1500 C, graphite reacts with substances containing oxygen, including 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, CO ₂ , carbon monoxide, CO.

Section: 6 Accidental Release Measures

Personal Precautions:	Wear approved dust mask, safety goggles, and conventional work gloves.
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.

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 than 10 J (very low hazard of spark conflagration)

Section: 8 Exposure Control/Personal Protection

INGREDIENTS	CAS NO	%	ACGIH TWA	CONTROL REFERENCE
Natural Graphite	7782-42-5	100	2.0 mg/m ³ Respirable dust	2013 ACGIH TLV Handbook
Silica, var Quartz	14808-60-7	0 . 5 4	0.025 mg/m ³ Respirable dust	2013 ACGIH TLV Handbook

Engineering Measures: Use adequate dust collection to maintain dust levels below the control or recommended 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 (mmHg):	NA
% Volatile (By Wt.):	0-4%
Solubility in Water:	Insoluble
Evaporation Rate:	Not applicable
pH:	NA
Auto Ignition:	Above 500 °C
Decomposition Temp:	Oxidizes above 400C
Dust Explosion class:	ST1=KST>0-200 bar m/s
Flash Point:	N/A Solid substance with very high melting point.

Section: 10 Stability And Reactivity

hazardous polymerization	will not occur
stability	Stable. Will not polymerize
incompatibility	Oxidizing agents.
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 can form explosive mixtures with air. Avoid contact between graphite dust clouds and high energy ignition sources. Classified as not flammable.
hazardous products of decomposition	Carbon Dioxide (CO ₂), Carbon Monoxide (CO)

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.

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.

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.

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
Hazard Class:	Non Hazardous
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 Required:	No label required
Additional Transport Info:	Technical Name (N.O.S.): Natural Graphite

Section: 15 Regulatory Information

Not Classified	
Inventory Information:	
EEC EINECS:	#231-955-3
US TSCA:	Yes
Canada DSL:	Yes
Canada NDSL:	No
Australian AICS:	Yes
Korean ECL:	Yes
Asia PAC:	Yes
Swiss Giftliste 1:	Yes #G8422
IECSC:	Yes
PICCS:	Yes
New Zealand NZLoC:	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
whmis classification	WHMIS Classification / Symbol: D-2A: Very Toxic.

Section: 16 Other Information

Abbreviations Used:

ACGIH TWA:	American Council of Government and Industrial Hygienists Time Weighted Average value.
CAS:	Chemical Abstracts Service
NA or n/a:	Not applicable
N.O.S.:	Not otherwise specified
Reference	Manufacturer's material safety data sheet.
Prepared by	Kama pigments

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