

MATERIAL SAFETY DATA SHEET

MSDS Number: mk-103

Manufacture: IBIDEN CO.,LTD.

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SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS - Chemical Name & Common Names (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	%	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Artificial Graphite	(wt.%)	> 99.9		
Ash	(wt.%)	< 0.1		
(CAS No.: 7782-42-5)				
Non-Hazardous Ingredients				
TOTAL		100		

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Melting Point	3,700 deg.C	Specific Gravity (H ₂ O = 1)	1.70 ~ 1.95
Vapor Pressure (mm Hg and Temperature)	NO DATA	Boiling Point	NO DATA
Vapor Density (Air = 1)	NO DATA	Evaporation Rate	NO DATA
Solubility in Water	INSOLUBLE	Water Reactive	NO REACTION

Appearance and Odor Gray to Black, No Odor

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method Used	NO DATA	Auto-Ignition Temperature	NO DATA	Flammability Limits in Air% by Volume	NO DATA	LEL	NO DATA	UEL	NO DATA
Extinguisher Media	Water or common extinguisher								
Special Fire Fighting Procedures	Isolate damage area, keep unauthorized personnel out. Water spray may be useful in minimizing or dispersing vapors.								
Unusual Fire and Explosion Hazards	No unusual fire or explosion hazards are expected.								

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY

-
- Stable
-
-
- Unstable

Conditions to Avoid

High Temperature (above 400 deg.C) at Air

Incompatibility (Material to avoid)

Strong oxidizing agents

Hazardous Decomposition Products

Combustion can yield carbon dioxide and carbon monoxide.

HAZARDOUS POLYMERIZATION

Conditions to Avoid

-
- May Occur
-
-
- Will not Occur

SECTION 5 - HEALTH HAZARD DATAPRIMARY ROUTES
OF ENTRY

-
- Inhalation
-
- Ingestion
-
-
- Skin Absorption
-
- Not Hazardous

CARCINOGEN
LISTED IN

-
- NTP
-
- OSHA
-
-
- IARC Monograph
-
- Not Listed

HEALTH HAZARDS

Acute NO DATA

Chronic Lung irritation due to deposition of dust particles in the lungs has been reported.

Signs and Symptoms
of Exposure

Coughing, shortness of breath and bronchitis.

Medical Conditions

Not Known

Generally Aggravated by Exposure

EMERGENCY FIRST AID PROCEDURES - Seek medical assistance for further treatment, observation and support if necessary.

Eye Contact

Do not rub the eyes. Wash the eyes with clean water.

Skin Contact

Wash with water or soap and water.

Inhalation

Gargle the throat and rinse the mouth well.

Ingestion

Drink water a lot then try to vomit.

SECTION 6 - CONTROL AND PROTECTIVE MEASURESRespiratory Protection
(Special Type)

Suitable filter-type

Protective Gloves

Impermeable type

Eye Protection

Safety Glasses

VENTILATION
TO BE USED

Local Exhaust

Mechanical (General)

Special

Other (Specify)

Other Protective Clothing and Equipment

Safety Shoes

Hygienic Work Practices

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURESSteps to be Taken if Material
is Spilled or ReleasedIsolate spill area and keep unauthorized personnel out. Minimize dust generation.
Sweep up dust and package appropriately for disposal.

Waste Disposal Methods

Consult state and local regulations regarding the proper disposal of this material.

Precautions to be Taken
in Handling and StorageWear appropriate protective equipment (See Section 6). In case of handling
weighty material, use forklift or crane. Keep away from incompatible material.

Other Precautions and/or

Contact IBIDEN CO.,LTD.

Special Hazards

NFPA

Rating Health__ Flammability__ Reactivity__ Special__

HMIS

Rating Health__ Flammability__ Reactivity__ Personal Protection__