



Black Carbon Powder

MATERIAL SAFETY DATA SHEET

Section 1

Products Description

Product Name: Black Carbon Powder

Recommended use: Reuse, Recycling, Dyeing

Recommended restrictions: For industrial use only

Company information: Company: INMAA INTERNATIONAL
P.O. Box: 44220, Jeddah 21581 Saudi Arabia
Tel: +966 12 22 12345 Email: info@inmaa.sa
Website: www.inmaa.sa

Section 2

Hazard Identification

Physical hazards:	Not classified
Health hazards	Acute toxicity, inhalation
Environmental hazards:	Specific target organ toxicity following repeated exposure
Potential health effects:	Hazardous to the aquatic environment, long-term hazard

Section 3

Composition / Information on Ingredients

Composition Comments	Complete composition is provided below and may include some components classified as non-hazardous	
Components	CAS #	Percent
Carbon	7440-44-0	40 - 55
Trisodium hexafluoroaluminate (Cryolite)	13775-53-6	30 - 50
Aluminium oxide (non-fibrous)	1344-28-1	7 - 20
Synonym(s): Alumina FERRIC OXIDE	1309-37-1	0 - 10
Iron sulphide	1317-37-9	0-1
Sodium beryllium fluoride	13871-27-7	<0.1



Section 4

First Aid Measures

Eye contact
Skin contact

Rinse eyes with plenty of water or saline for at least 15 minutes. Consult a physician.
Wash with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

Inhalation

Remove to fresh air. Check for clear airway, breathing, and presence of pulse. If breathing is difficult, provide oxygen. Loosen any tight clothing on neck or chest. Provide cardiopulmonary resuscitation for persons without pulse or respirations. Consult a physician.

Ingestion

If swallowed, dilute by drinking water. Recommend quantities up to 30 mL (~1 oz.) in children and 250 mL (~9 oz.) in adults. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do NOT induce vomiting. Rinse mouth. Consult a physician.

Most important
symptoms/effects, acute and
delayed

Direct contact: Can cause irritation of the eyes and skin. Dust: Can cause irritation of the upper respiratory tract.
See Section 11 for additional information on health hazards.

Medical conditions aggravated
by exposure

Asthma, chronic lung disease and skin rashes.

Indication of immediate
medical attention and special
treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Section 5

Firefighting Procedures

Suitable extinguishing media

Dry chemical, foam, carbon dioxide, water fog.

Unsuitable extinguishing media

None known.

Specific hazards arising from
the chemical

Although a similar material has been tested and found to be non-explosive, the possibility exists that high concentrations of airborne dust generated during processing could present an explosion hazard.

Special protective equipment
and precautions for firefighters
General fire hazards

Firefighters should wear CE approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.

While not considered "flammable" or "combustible" as defined by regulatory or governmental agencies, the material will burn if ignited.

Hydrogen fluoride gas can be evolved above 930°F (500°C) in the presence of water vapor.

Explosion data

Sensitivity to mechanical impact

Not sensitive.

Sensitivity to static discharge

Take precautionary measures against static discharges when there is a risk of dust explosion.



Section 6 Spill or Leak Procedures

Personal precautions, protective equipment and emergency procedures	Avoid contact with skin and eyes. Avoid generating dust.
Personal precautions, protective equipment and emergency procedures	
Evacuation procedures Methods and materials for containment and cleaning up	Avoid contact with skin and eyes. Avoid generating dust. Use personal protection.
Environmental precautions	Avoid generating dust. Use dry cleanup procedures. Pick up mechanically. Sweep dust with natural bristle broom (push type recommended). Do not allow to enter drains, sewers or watercourses.

Section 7 Handling and Storage

Handling

Avoid contact with skin and eyes. Avoid generating dust. Keep material dry. Use personal Protection.

Storage

Containerize in drums, tarped dump truck, or bulk container, so that dusting is minimal during storage and transportation. Store away from incompatible materials (See Section 10).

Section 8 Protection Information

Occupational exposure limits			
	Type	Value	Form
Sodium beryllium fluoride (CAS 13871-27-7)	STEL	0.01 mg/m3	(as Be)
	TWA	0.002 mg/m3	(as Be)
	TWA	0.00005 mg/m3	Inhalable fraction. (as Be)
Trisodium Hexafluoroaluminate (Cryolite) (CAS 13775-53-6)	TWA	2.5 mg/m3	(as F)
	Type	Value	Form
Aluminium oxide (non-fibrous) (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction
Ferric oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
Additional components			
	Type	Value	
Hydrogen fluoride (CAS 7664-39-3)	Ceiling	2 ppm	
	TWA	0.5 ppm	



Engineering controls	Use with adequate explosion-proof ventilation designed to handle particulates to meet the limits , Exposure Guidelines.
Personal protective equipment	
Eye / face protection	Wear safety glasses with side shields. Use tight fitting goggles if excessive levels of dust are generated
Hand protection	Wear appropriate gloves to avoid any skin injury. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material
Skin and body protection	The need for personal protective equipment should be based upon a hazard assessment and recommendations from health / safety professionals
Respiratory protection	Use CE-approved respiratory protection as specified by an Industrial Hygienist or other qualified professional if concentrations exceed the limits . Suggested respiratory protection: P2, Acid gas cartridge for hydrogen fluoride gas and sulphur dioxide
Personal protective equipment Thermal hazards	None known
Hygiene measures	Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.
Recommended monitoring procedures	Follow standard monitoring procedures.

Section 9

Physical Data

Form	Fines to coarse powder
Color	Grey-black
Odour	Slight
Odour threshold	Not available
Density	2.30 g/cm3
pH	Not available
Melting point/freezing point	1612.16 °C (2933.89 °F) estimated
Initial boiling point and boiling range	3826.43 °C (6919.58 °F) estimated
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit – upper (%)	Not available
Flammability limit – lower (%)	Not available
Explosive properties	Not available
Vapour pressure	288566.65 hPa estimated
Vapour density	Not available
Relative density	Not available
Solubility(ies)	Slightly soluble
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available



Section 10

Stability and Reactivity Data

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal conditions of use, storage, and transportation.
Possibility of hazardous reactions	Hazardous polymerisation does not occur. Hydrogen fluoride gas can be evolved above 930°F (500°C) in the presence of water vapor.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong acids and oxidizing agents. Contact with strong acids releases hydrogen fluoride.
Hazardous decomposition products	Combustion can generate carbon monoxide, carbon dioxide, iron oxide, carbonyl sulphide and sulphur dioxide.

Section 11

Toxicity Data

Health effects associated with ingredients

Black Carbon Powder Can cause irritation of eyes, mucous membranes and upper respiratory tract.

Information on likely routes of exposure

Inhalation Dust: Can cause irritation of the upper respiratory tract. Chronic overexposures: Can cause scarring of the lungs (pulmonary fibrosis), fluoride deposition in bones and cartilage (fluorosis) and lung sensitization in susceptible individuals. Associated with asthma.

Additional health effects from elevated temperature processing (e.g., combustion):
Vapors: Can cause severe irritation of the respiratory tract. Acute overexposure: Can cause difficulty breathing and the accumulation of fluid in the lungs (pulmonary edema). Effects can be delayed up to 24 hours.

Skin contact
Eye contact

Direct contact: Can cause irritation.
Direct contact: Can cause irritation.

Ingestion

Not relevant, due to the form of the product.
Direct contact: Can cause irritation of the eyes and skin. Dust: Can cause irritation of the upper respiratory tract.
Toxic if swallowed. Harmful if inhaled.

Section 12

Ecological information

Eco-toxicity	Toxic to aquatic life with long lasting effects.
Persistence and degradability	The product solely consists of inorganic compounds which are not biodegradable.
Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.
Mobility in soil	No data available.
Other adverse effects	None known.



Section 13

Disposal Information

Disposal instructions	Reuse or recycle material whenever possible. If reuse or recycling is not possible, disposal must be made according to local or governmental regulations
Waste codes	RCRA Status:
Waste from residues / unused products	If reuse or recycling is not possible, disposal must be made according to local or governmental regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

Section 14

Transport Information

General Shipping Information

Basic Shipping Information

ID number	UN3077
Proper shipping name	Environmentally hazardous substance, solid, n.o.s. (Trisodium hexafluoroaluminate)
Technical Name	Trisodium hexafluoroaluminate.
Hazard class	9
Packing group	III

IATA Notes:

This classification may be used for International Air Transportation Association (IATA) and International Civil Aviation Organization (ICAO) international air shipments. Packaging Instruction 911 applies.

IMDG Code Notes:

The words "MARINE POLLUTANT" must supplement the proper shipping name on transport document as indicated in International Maritime Dangerous Goods code (IMDG) 5.4.1.4.3.6. for international carriage by vessel.

IBCs need to be "marked" on two opposing sides with the Proper shipping name and technical name in addition to the UN number markings (IMDG 5.2.1).

IBC Code

Not regulated as dangerous goods.

Disclaimer

This section provides basic classification information and, where relevant, information with respect to specific modal regulations, environmental hazards and special precautions. Otherwise, it is presumed that the information is not available/not relevant.

Section 15

Regulatory Information

Based on Region, check availability

Section 16

Additional Information

The information contained herein is based on the present state of our knowledge, but without liability

DISCLAIMER: This information contained in the data sheet is to the best of our knowledge correct and up to date. Under well-defined conditions. Its accuracy or suitability under the actual conditions of any independent use is not guaranteed and must be determined by the user. All advice given about this product is given in good faith. Since as we have no control over conditions of substrate, manufacturer and seller cannot accept any liability in connection with the use of the product relative to coverage, performance, injury, or damage, unless we specify in writing to do so. The information in this data sheet is subject to change without prior notice and it is the user responsibility to ensure it is current.