

Material Safety Data Sheet

Revision date: 05/01/2011

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name: Amorphous Graphite

Synonyms:Graphite
Chemical Family:Mine
Formula: Mixture
Manufacturer:

Sanming Coffer Fine Chemical Industrial Co., Ltd

ADD: Jinsha Yuan Chuang-Ye Park, Hi-Tech Development Zone, Sanming City P.R.China

TEL: 86-598-5853979 FAX: 86-598-5852606

2. COMPOSITION/INFORMATION ON INGREDIENTS

Name CAS Number Weight% Amorphous Graphite 7782-42-5 60 -100%

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye and respiratory irritation. May cause delayed injury to lungs. Airborne dust may be explosive.

Hazard Ratings Flammability: 0

Unknown Aquatic Toxicty 1

Body Contact: 0 **Reactivity:** 0 **Chronic:** 0

Scale: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4

EMERGENCY OVERVIEW

PETROLEUM COKE IS A CHUNKY, POROUS, BLACK, CARBON MATERIAL. WHEN CALCINED, IT IS CRUSHED AND PULVERIZED INTO A FINE BLACK POWDER. IT IS NEITHER A FLAMMABLE NOR COMBUSTIBLE MATERIAL BUT COULD BURN IF HEATED TO EXTREMELY HIGH TEMPERATURES.

OSHA WARNING LABEL:

THIS PRODUCT HAS BEEN EVALUATED AND DOES NOT REQUIRE ANY HAZARD WARNING LABEL UNDER THE OSHA HAZARDCOMMUNICATION STANDARD. CONSUMERWARNING LABEL:

A CONSUMERWARNINGLABEL IS NOTAPPLICABLE FORTHIS PRODUCT.

4. FIRST AID MEASURES

Inhalation: Excessive dust from powdered material (>5mg/kg) may cause mild respiratory irritation.

Ingestion: Not likely to be toxic by ingestion.

Skin contact: None expected from acute exposure. **Eye contact:** Dust may be a mechanical irritant.

Carcinogenic Evaluation: Product information:

Notes: The International Agency for Research on Cancer (IARC) has not evaluated this product.

Component Information

Inhalation: If affected, move person to fresh air. If breathing is difficult, administer oxygen. If not breathing or if not heartbeat, give artificial respiration or cardiopulmonary resuscitation (CPR). Immediately call a physician. If symptoms or irritation occur with any exposure, call a physician.



Skin contact: Wash with soap and large amounts of water. If symptoms or irritation occur, call a physician.

Ingestion: Ingestion not likely. If large amounts are swallowed, immediately call a physician.

Eye contact: Flush eyes with large amounts of tepid water for at least15minutes.If

symptoms or irritation occur, call a physician.

Medical conditions aggravated by exposure: No data available.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFT/AC) can be used. Fire fighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

Specific hazards: This product is neither a flammable nor combustible material, but will burn when heated to extremely high temperatures.

Special protective equipment for fire fighters: Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Keep surrounding area cool with water spray from a distance and prevent further ignition of combustible material. Avoid excessive water spray application. Keep run-off water out of sewers and water sources.

Flash point: >200F

Auto ignition temperature: No data available

Flammable limits in air -lower(%): No data available Flammable limits in air-upper(%): No data available

NFPA rating: HMIS classification:

Health 1 health 1

Flammability1 flammability 1 Reactivity1 reactivity 1

Other- special: see section 8 for guidance in selection of personal protective equipment

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: No special procedures. Advice authorities and National Response Centre (800-424-8802) if substance has entered a watercourse or sewer. Notify local health and pollution control agencies, if appropriate.

Handling:

Comply with all applicable EPA, OSHA, NFPA and consistent state and local requirements. Use appropriate grounding and bonding practices. Store in properly closed containers that are appropriately labelled and in a cool well-ventilated area. Don not expose to heat, open flames, strong oxidizers or other sources of ignition.

PERSONAL PROTECTIVE EQUIPMENT

Engineering measures: Local or general exhaust required in an enclosed area or when there is inadequate ventilation.

Respiratory protection: Not required under normal conditions and adequate ventilation. Use dust/ fume respirator if use generates excessive dust/fume or concentrations exceed permissible limits.

Skin and body protection: Gloves.

Eye protection: Dust goggles if use produces excessive dust/fume concentrations.

Appearance: Black Porous Chunks or Powder Physical state (Solid/Liquid/Gas): Solid Substance type (Pure/Mixture): Mixture

Color: Black

Odor: Slight Hydrocarbon

Molecular weight: Not determined.

7. HANDLINGAND STORAGE

Handling Precautions Avoid creating or inhaling dust. Avoid dust accumulations. Wet activated carbon removes oxygen from air causing a severe hazard to workers inside carbon vessels and



enclosed or confined spaces. Before entering such an area, sampling and dark procedures for low oxygen levels should be taken to ensure ample oxygen availability.

Storage Information Store away from oxidizers. Store in a dry location. Keep from heat, sparks, and open flames. Product has a shelf life of 60 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls A well ventilated area to control dust levels.

Respiratory Protection Not normally needed. But if significant exposures are possible then the following respirator is recommended: Dust/mist respirator. (95%)

Hand Protection Normal work gloves.

Skin Protection Normal work coveralls.

Eye Protection Wear safety glasses or goggles to protect against exposure.

Other Precautions None known.

9. PHYSICALAND CHEMICAL PROPERTIES:

Physical State: Solid Color: Dark gray Odor: Odorless pH: Not Determined

Specific Gravity @ 20 C (Water=1): 2.1-2.4

Density @ 20 C (kg/l): Not Determined

Bulk Density @ 20 C (kg/m₃): Not Determined

Boiling Point/Range (C): 4200

Freezing Point/Range (C): Not Determined Pour Point/Range (C): Not Determined

Flash Point/Range (C): > 356

Flash Point Method: Not Determined

Autoignition Temperature (C): Not Determined

Flammability Limits in Air - Lower (g/m₃): Not Determined Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (g/m₃): Not Determined Flammability Limits in Air - Upper (%): Not Determined

Vapor Pressure @ 20 C (mmHg): 1

Vapor Density (Air=1): 0.4

Percent Volatiles: Not Determined

Evaporation Rate (Butyl Acetate=1): Not Determined

Solubility in Water (g/100ml): Insoluble

Solubility in Solvents (g/100ml): Not Determined

VOCs (q/l): Not Determined

Viscosity, Dynamic @ 20 C (centipoise): Not Determined Viscosity, Kinematic @ 20 C (centistrokes): Not Determined Partition Coefficient/n-Octanol/Water: Not Determined

Molecular Weight (g/mole): Not Determined Decomposition Temperature (C): Not Determined

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid None known.

Incompatibility (Materials to Avoid) Strong acids. Strong alkalis.

Hazardous Decomposition Products Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation May cause mild respiratory irritation.

Skin Contact May cause mild skin irritation.

Eye Contact May cause eye irritation.

Ingestion May cause mild gastric distress.



Aggravated Medical Conditions Skin disorders.

Chronic Effects/Carcinogenicity Prolonged, excessive exposure to dust may cause

pneumoconiosis, a lung disease

caused by inhaling dust particles less than 0.5 micrometers into the lungs.

Other Information None known.

Toxicity Tests

Oral Toxicity: Not determined

Dermal Toxicity: Not determined

Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity Not determined **Genotoxicity:** Not determined

Reproductive /

Developmental Toxicity: Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined Persistence/Degradability Not determined

Bio-accumulation Not Determined **Ecotoxicological Information Acute Fish Toxicity:** Not determined

Acute Crustaceans Toxicity: Not determined Acute Algae Toxicity: Not determined Chemical Fate Information Not determined

Other Information Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal Method Bury in a licensed landfill according to federal, state, and local regulations. **Contaminated Packaging** Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

ADR

Not restricted

Air Transportation ICAO/IATA

Not restricted

Sea Transportation

IMDG

Not restricted

Other Shipping Information

Labels: None

15. REGULATORY INFORMATION

Chemical Inventories

Australian AICS Inventory Not Determined

US TSCA Inventory All components listed on inventory or are exempt.

EINECS Inventory This product, and all its components, complies with EINECS

Classification Not Classified

Risk Phrases None Safety Phrases None

16 Other Information

Disclaimer: The information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.