

MATERIAL SAFETY DATA SHEET

Carbon

Section 01 - Chemical And Product And Company Information

Product Identifier Activated carbon

Product Use Water purification, gold recovery, and air scrubbing.

Supplier Name..... Panther Industries Inc
108 Internal Rd
Davidson, SK
SOG-1A0

Prepared By..... Panther Ind Technical Department

Preparation Date..... March 2, 2006

24-Hour Emergency Phone..... 306-664-2522

Section 02 - Composition / Information on Ingredients

Hazardous Ingredients..... Carbon 100

CAS Number..... Carbon 7440-44-0

Synonym (s)..... Activated granular carbon; activated powdered carbon; activated carbon, powdered; activated charcoal; animal bone black

Section 03 - Hazard Identification

Inhalation..... Non-toxic though inhalation.

Skin Contact / Absorption..... None

Eye Contact..... Mechanical dust irritation

Ingestion..... Non-toxic though ingestion

Exposure Limits..... OSHA/PEL= 5mg/m³ as resp.
ACGIH/TLV= 10mg/m³ as total

Section 04 - First Aid Measures

- Inhalation**..... Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention.
- Skin Contact / Absorption**..... Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists.
- Eye Contact**..... Flush immediately with water for at least 20 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek medical attention.
- Ingestion**..... No known health effects. Seek medical attention if any problems are experienced.
- Additional Information**..... Not available

Section 05 - Fire Fighting

- Conditions of Flammability**..... Non-combustible under normal circumstances. Once ignited, the fire generally burns slowly with a dull glow and may be difficult to detect.
- Means of Extinction**..... Use water spray, alcohol foam, dry chemical or carbon dioxide.
- Flash Point**..... Data not available
- Auto-ignition Temperature**..... Above 350°C
- Upper Flammable Limit** Data not available
- Lower Flammable Limit**..... Data not available
- Hazardous Combustible Products.** Carbon monoxide and carbon dioxide
- Special Fire Fighting Procedures...** Wear NIOSH-approved self-contained breathing Apparatus and protective clothing.
- Explosion Hazards**..... Airborne dust may create an explosion hazard.

Section 06 - Accidental Release Measures

Leak / Spill..... Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Prevent material from entering sewers.

Deactivating Materials..... Not available

Section 07 - Handling and Storage

Handling Procedures..... Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.

Storage Requirements..... Store in a clean, well ventilated area away from oxidizers, acids, ignition sources, heat and combustible materials.

Section 08 - Personal Protection and Exposure Controls

Protective Equipment

Eyes..... Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.

Respiratory..... Respiratory protection is not normally required. If use creates dust formations, then a NIOSH-approved respirator with a dust cartridge is recommended. Wet activated carbon removes oxygen from air causing a severe hazard to workers inside confined spaces. Before entering such an area, sampling and work procedures for low oxygen levels should be taken (such as wearing a self-contained breathing apparatus).

Gloves..... Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing with soap and water, dry thoroughly before reuse.

Clothing..... Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing with soap and water, dry thoroughly before reuse.

Footwear..... Impervious boots of chemically resistant material should be worn if required.

Other..... No other information available

Engineering Controls

Ventilation Requirements..... Mechanical ventilation (dilution or local exhaust), process or personnel enclosure, and control of process conditions. Supply sufficient replacement air to make up for air removed by exhaust systems.

Other..... Emergency shower and eyewash should be in close proximity.

Section 09 - Physical and Chemical Properties

Physical State..... Solid

Odor and Appearance..... Black odourless particulate solid, pellet, or powder

Odor Threshold..... Not applicable

Specific Gravity (Water=1)..... 2.25

Vapor Pressure (mm Hg, 30C)..... Not applicable

Vapor Density (Air=1)..... Not applicable

Evaporation Rate..... Not applicable

Boiling Point..... 4200°C

Freeze/Melting Point..... 3652°C sublimes

pH..... Data not available

Water/Oil Distribution Coefficient... Data not available

Bulk Density..... 400-600 kg/m³

% Volatiles by Volume..... 0%

Solubility in Water..... Insoluble

Molecular Formula..... C

Molecular Weight..... 12

Section 10 - Stability and Reactivity

Stability..... Stable under normal conditions.

Incompatibility..... Strong oxidizers such as ozone, liquid oxygen, chlorine, potassium permanganate, etc.

Hazardous Products of Decomposition Carbon monoxide may be generated in the event of a fire (especially with incomplete combustion in an enclosed space).

Polymerization..... Will not occur

Section 11 - Toxicological Information

Irritancy..... Data not available.

Sensitization..... Data not available

Chronic/Acute Effects..... None

Synergistic Materials..... Data not available

Animal Toxicity Data..... LD₅₀(rat,oral)= >10g/kg
LC₅₀(rat, inhalation)= >64.4mg/L

Carcinogenicity..... Not considered to be carcinogenic as per IARC, NTP, and OSHA.

Reproductive Toxicity..... Data not available

Teratogenicity..... Data not available

Mutagenicity..... Data not available

Section 12 - Ecological Information

Fish Toxicity..... Data not available.

Biodegradability..... Data not available.

Environmental Effects..... Data not available. None expected.

Section 13 - Disposal Considerations

Waste Disposal..... Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 - Transportation Information

TDG Classification

Class..... Not regulated

Group..... Not regulated

PIN Number..... Not regulated

Other..... Secure containers (full and/or empty) with suitable hold down devices during shipment.

Section 15 - Regulatory Information

WHMIS Classification.....Not a controlled product

NOTE: THE PRODUCT LISTED ON THIS MSDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS MSDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

Section 16 - Other Information

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.