MATERIAL SAFETY DATA SHEET

Date Printed: 10/25/2005 Date Updated: 04/08/2004

Version 1.1

Section 1 - Product and Company Information

Product Name Charcoal, activated, meets USP

testing specifications

Product Number C7606 Brand SIAL

Company Sigma-Aldrich Street Address 3050 Spruce Street

City, State, Zip, Country SAINT LOUIS MO 63103 US

Technical Phone: 314 771 5765

Emergency Phone: 414 273 3850 Ext. 5996

Fax: 800 325 5052

Section 2 - Composition/Information on Ingredient

Substance Name CAS # SARA 313 CARBON, MEETS USP TESTING SPECS. 7440-44-0 No

Formula C

Synonyms Acticarbone * AG 3 (Adsorbent) * AG 5 * AG 5 (Adsorbent) * AK (Adsorbent) * Amoco PX 21 *

(Adsorbent) * AK (Adsorbent) * Amoco PX 21 *
Anthrasorb * AR 3 * ART 2 * AU 3 * BAU * BG 6080
* Colgon BPL * Colgon PCB-D * Colgon PCB 12X30 *
Canesorb * Carbon-12 * Carbopol Extra * Carbopol
M * Carbopol Z 4 * Carbopol Z Extra * Carbosieve
* Carbosorbit R * Cecarbon * CF 8 * CF 8 (Carbon)

* CLF II * CMB 50 * CMB 200 * Coke powder * Columbia LCK * CUZ 3 * CWN 2 * Darco * Filtrasorb * Filtrasorb 200 * Filtrasorb 400 * Grosafe * Hydrodarco * Irgalite 1104 * Jado * K 257 * MA 100 (Carbon) * Norit * Nuchar * OU-B * Pelikan C 11/1431a * SKG * SKT * SKT (adsorbent) * SU 2000 * Suchar 681 * Supersorbon IV * Supersorbon S 1 *

U 02 * Watercarb * Witcarb 940 * XE 340 * XF 4175L

RTECS Number: FF5250100

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful.

Harmful by inhalation. Irritating to eyes, respiratory system and

skin.

Target organ(s): Lungs.

HMIS RATING

HEALTH: 2*
FLAMMABILITY: 0
REACTIVITY: 0

NFPA RATING

HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

EXPLOSION DATA

Dust Potential: This material, like most materials in powder form, is capable of creating a dust explosion.

FLASH POINT

N/A

AUTOIGNITION TEMP

450 °C

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material

Section 7 - Handling and Storage

HANDLING

User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed. Keep away from heat, sparks, and open flame. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator. Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

EXPOSURE LIMITS, RTECS

Country Source Type Value

USA MSHA Standard

Remarks: Nuisance Particulates.

USA OSHA. PEL 8H TWA 15 MG/M3, TOTAL DUST

New Zealand OEL

Remarks: check ACGIH TLV

Section 9 - Physical/Chemical Properties

Appearance Physical State: Solid

Color: Black

Form: Powder Granules

Odor: Odorless

Property Value At Temperature or Pressure

Molecular Weight 12.01 AMU pH 6.0 - 9.0 BP/BP Range N/A MP/MP Range N/A Freezing Point N/A

Vapor Pressure < 0.1 mmHg 20 °C

Vapor Density N/A Saturated Vapor Conc. N/A

Bulk Density 0.336 kg/l

Odor Threshold N/A Volatile% N/AVOC Content N/AWater Content N/ASolvent Content N/AEvaporation Rate N/AViscosity N/ASurface Tension N/APartition Coefficient N/ADecomposition Temp. N/AFlash Point N/A

Explosion Limits N/A
Flammability N/A
Autoignition Temp 450 °C
Refractive Index N/A
Optical Rotation N/A
Miscellaneous Data N/A

Solubility Solubility in Water: Insoluble.

Solvent: Insoluble.

Other Solvents: ORGANIC SOLVENTS

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable.

Materials to Avoid: Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: Material is irritating to mucous membranes and upper

respiratory tract. Harmful if inhaled. Ingestion: May be harmful if swallowed.

TARGET ORGAN(S) OR SYSTEM(S) Lungs.

SIGNS AND SYMPTOMS OF EXPOSURE

The chemical, physical, and toxicological properties of this product have not been thoroughly investigated.

TOXICITY DATA

Intravenous Mouse 440 MG/KG LD50

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat
Dose: 167 MG/KG

Route of Application: Subcutaneous

Exposure Time: (8D PREG)

Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn

Indication of Danger: Harmful.

R: 20-36/37/38

Risk Statements: Harmful by inhalation. Irritating to eyes, respiratory system and skin.

S: 22-26-36/37

Safety Statements: Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.

Risk Statements: Harmful by inhalation. Irritating to eyes, respiratory system and skin.

Safety Statements: Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.

US Statements: Target organ(s): Lungs.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes NDSL: No

Section 16 - Other Information

DISCLAIMER

For R&D or manufacturing use. Not for prescription compound or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our

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