#### MATERIAL SAFETY DATA SHEET

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Version 1.11

## Section 1 - Product and Company Information

Product Name CARBON, GLASSY, SPHERICAL POWDER, 2-12

MICRON, 99.95% METALS BASIS

Product Number 484164 Brand ALDRICH

Company Sigma-Aldrich Brasil Ltda. Address Av. das Nações Unidas, 23.043

São Paulo SP 04795-100 BR

Technical Phone: 55 11 3732 3100 55 11 5522 9895 Fax:

## Section 2 - Composition/Information on Ingredient

SARA 313 Substance Name CAS # 7440 - 44 - 0CARBON No

Formula

Synonyms Acticarbone \* AG 3 (Adsorbent) \* AG 5 \* AG 5 (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

Caution: Avoid contact and inhalation.

HMIS RATING

HEALTH: 0

FLAMMABILITY: 0 REACTIVITY: 0

NFPA RATING

HEALTH: 0

FLAMMABILITY: 0 REACTIVITY: 0

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

#### 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 breathing becomes difficult, call a physician.

#### DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

## 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(S) OF PERSONAL PRECAUTION(S)

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

# 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 pickup is complete.

## Section 7 - Handling and Storage

## HANDLING

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

## **STORAGE**

Suitable: Keep tightly closed. Keep away from heat, sparks, and

# Section 8 - Exposure Controls / PPE

## ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.

Hand: Protective 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

## EXPOSURE LIMITS

Country Source Type Value OSHA. REL 2.1 mg/m3

## 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

MP/MP Range N/A
Freezing Point N/A

Vapor Pressure < 0.1 mmHg 20 °C

N/A

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

Bulk Density 0.336 kg/l

Odor Threshold N/A Volatile% N/AVOC Content N/A Water Content N/ASolvent Content N/A Evaporation Rate N/AViscosity N/ASurface Tension N/APartition Coefficient N/ADecomposition Temp. N/AFlash Point N/A Explosion Limits N/A

Flammability

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

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: Strong 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: May cause skin irritation.

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

Eye Contact: May cause eye irritation.

Inhalation: Material may be irritating to mucous membranes and

upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

## SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## TOXICITY DATA

Intravenous Mouse 440 MG/KG

#### 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

S: 24/25-22

Safety Statements: Avoid contact with skin and eyes. Do not breathe dust.

## US CLASSIFICATION AND LABEL TEXT

US Statements: Caution: Avoid contact and inhalation.

#### 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 use only. Not for drug, household 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 knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2010 Sigma-Aldrich Co. License granted to make unlimitedpaper copies for internal use only.