16705

Material Safety Data Sheet

Chemi-pure

Distributor: Boyd Enterprises, Inc.
1670 NE 205 Terrace
Miami, FL 33179
Ph: 305-651-2496
Fax: 305-651-4567

Section 1: Ingredients

Activated carbon and Ion-exchange resins

Section 2: Physical data

Appearance: comes packaged in a nylon filter pouch, various sized black and dark colored granules.

Section 3: First Aid Measures

Skin: Wash material off the skin with soap and water. Seek medical attention if irritation occurs.
Eyes: flush with copious amounts of water. Seek medical attention if irritation occurs.
Ingestion: Give one or two glasses of water to drink. Seek medical attention if gastrointestinal symptoms develop.
Inhalation: Remove to fresh air. Seek medical attention if cough or respiratory symptoms develop.

Section 4: Hazard Data

Effect of acute exposure to product: Can product mechanical irritation to the eyes. May cause skin irritation of hypersensitive personnel.
Effect of chronic exposure to product: Mechanical irritation to the eyes and skin irritation to hypersensitive personnel.

Exposure limits: No	Carcinogenicity: No	Teratogenicity: No
Mutagenicity: No	Reproductive Toxicity: No	

Section 5: Accidental Release Measures

The materials are in their original state and are not harmful to the environment. Normal disposal and clean up measures can be used without any harm.

Section 6: Handling and Storage

Can be safely stored in any normal storage area, but keep away from sources of heat

Section7: Exposure controls, Personal Protection

Personal protective equipment: Wear impervious gloves and splash goggles while handling any exposed ingredients.
Other protective clothing or equipment: Long sleeve shirts and long trousers is recommended to prevent skin contact.
Work/hygienic practices: Flush product from hands with soapy water. Care should be taken to avoid contact with eyes until hands have been completely cleaned. Product has a tendency to cling to skin due to static charge. Care must be exercised to remove all product from skin. The product causes areas to become extremely slippery when spilled, and can cause falls. Sweep up spilled material and transfer for proper disposal.

Section 8: Toxicological Information

The materials are in their orginal state. Used product may exhibit characteristics of the absorbed materials/waste.

Section 9: Ecological Information

The materials are in their original state and are not harmful to the environment. Used product may exhibit characteristics of the absorbed materials/waste.

MATERIAL SAFETY DATA SHEET

#16705

Chemi Pure

Q-100 RESIN

SECTION I

Manufacturers Name:
Address :
Chemical Name : Benzene, diethenyl-,polymer with ethenylbenzene and ethenylethylbenzene, sulfonated, sodium salts.
Generic Family : Ion Exchange Resin
Product Use : Water Treatment Deionization
Name Of Preparer : Regulatory Affairs Date Prepared/Updated: 07/15/91

SECTION II - HAZARDOUS INGREDIENTS/INFORMATION

HAZARDOUS COMPONENTS

CAS NO.	CHEMICAL NAME	% MAX
69011-22-9	Benzene, diethenyl-,polymer with ethenylbenzene and ethenylethylbenzene, sulfonated, sodium salts	40-60
7732-18-5	Water	40-60

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical State: Solid
Specific Gravity: 1.3
Vapor Pressure (mm/Hg): 17 at 20 C for water
Vapor Density (Air=1): 0.62 for water
Odor: Odorless
Odor Threshold (ppm): N/A
Coefficient of water/oil distribution: N/A

Boiling Point (Deg.C): N/A
Freezing Point(Deg.C): 0
Solubility in Water: Insolubl
Evaporation Rate (H20=1): 1
pH(in an aqueous slurry): 6-9
Appearance: Spherical Beads

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

NFPA Fire Hazard Class: 1
Flash Point (Deg. C)/Method Used: N/
Auto Ignition Temperature (deg. C): Greater Than 500
Conditions of Flammability: ND
Flammable Limits: N/A
Extinguishing Media: Carbon dioxide, dry chemical or water fog
Hazardous combustion products: Same as Reactivity Data Section
Explosion data:
Sensitivity to mechanical impact: N/A
Sensitivity to Static Discharge: N/A
Special Fire Fighting Procedures: Wear MSHA/NIOSH approved pressure demand, self-contained breathing apparatus. Guard against contact of the product with the eyes during salvage operation.

 Chemi Pure

SECTION V – REACTIVITY DATA

NFPA Reactivity Rating: 1
Conditions under which product is chemically unstable: At temperatures above 204 deg. C decomposition occurs. Explosive reactions can occur in the presence of strong oxidizing agents.
Incompatibility (Materials to Avoid): Strong oxidizing agents such as nitric acid.
Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, styrene and divinylbenzene.
Hazardous Polymerization: Will Not Occur

SECTION VI – HEALTH HAZARD DATA

NFPA Health Hazard: 1
Effect of acute exposure to product: Can produce mechanical irritation to the eyes. May cause skin irritation of hypersensitive personnel.
Effect of chronic exposure to product: Mechanical irritation to the eyes and skin irritation to hypersensitive personnel.

Exposure Limits: ND	Mutagenicity: ND
Carcinogenicity: ND	Reproductive Toxicity: ND
Teratogenicity: ND	Toxicologically synergistic products: ND

Irritancy of Product: Eyes and Skin
Symptoms of exposure: Red, irritated eyes, itching and feeling that a particle exists between the eyelid and eye.
Emergency and First Aid Procedures: Flush eyes and skin with copious quantities of water for 15 minutes. If irritation persists, see a physician.

SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND USE

Handling procedures and equipment: No special handling is required beyond those outlined in this Material Safety Data Sheet. Avoid packing product in an unprotected glass column. Expansion of the product can cause the glass column to shatter.
Storage Requirements: Avoid freezing or prolonged storage above 50 deg. C because product contains water which will freeze and damage product or dry-out also damaging the product. Avoid contact with strong oxidizing agents such as nitric acid.
Special Shipping Information: Avoid freezing.
In case of spill or leak: Sweep area of product, collecting in a container for disposal
Waste Disposal Method: As supplied, new or used ion exchange resins generally are not hazardous and therefore are not considered as hazardous wastes. Used resins may meet the regulatory definition of hazardous wastes as a result of their service. (Refer to 40 CFR 261)
Regulatory agencies and many disposal sites may require verification of the hazardous or non-hazardous properties of the waste and a form of certification by the generator concerning the waste. Data necessary to make a determination can be developed through appropriate analysis of the material to be disposed of.
A representative of the material should be analyzed by a certified laboratory following procedures set forth in 40 CFR 261, Appendix II, Method 1311 Toxicity Characteristic Leaching Procedure (TCLP) and EP Toxicity Test Procedure.
Based on the results obtained from these analyses, disposal of spent resins can be accomplished in accordance with applicable federal and state regulations for solid and/or hazardous wastes.

SECTION 2 INGREDIENTS

	%	TLV (ACGIH)
Activated carbon (CAS 7440-44-0) (U.N. 1362)	100	Not listed *

*Product normally contains greater than 1% quartz:
see Section 8

Chemi Pure

SECTION 3 PHYSICAL DATA

Boiling point: Not applicable
Vapor pressure (mmHg at 20°C): zero
Vapor density (air = 1): Not applicable
Solubility: Insoluble in water and organic solvents
pH: Not applicable
Specific gravity: 250 - 600 g/l
% Volatile by volume: Not applicable
Appearance and odor: Black granules or powder without taste or odor

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

Flash point (and method): Not applicable
Autoignition temp.: Powdered - No generally accepted test method available
Granular - About 450°C (ANSI/ASTM D3466)

All carbonaceous materials will burn under certain conditions and activated carbons are no exception. Activated carbons, however, are not highly flammable and burn slowly without producing smoke or flame.

Extinguishing media:
Water (fog or fine spray), carbon dioxide
Avoid methods which may stir up dust clouds.

Special fire fighting protective equipment:
Self-contained breathing apparatus.

Unusual fire and explosion hazards:
Airborne dust is a weak explosion hazard.

Chem Pure

SECTION 5 REACTIVITY DATA

Stability:
Stable under normal conditions.

Incompatibility (materials to avoid):
Strong oxidizing agents.

Hazardous decomposition products:
Carbon dioxide, carbon monoxide.

Hazardous polymerization:
Will not occur.

SECTION 6 HEALTH HAZARD ASSESSMENT

General:
No toxicity data are available. Physical and chemical properties of activated carbon are used for the health hazard assessment.
Carcinogenicity: Activated carbon is not listed in the National Toxicology Program (NTP) Annual report on carcinogens nor has it been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) monographs or by OSHA.

Ingestion:
The acute oral LD 50 values are not available. Relative to other materials, a single dose of this product is relatively harmless by ingestion. Hodge, H.C. and Sterner, J.H., American Industrial Hygiene Association Quarterly, 10:4, 93, Dec. 1949.

Eye Contact:
This material will probably cause some mild physical irritation if contact is made with human eyes.

Skin Contact:
This material is not likely to be a primary irritant on human skin; it has a low potential for sensitization after skin contact.

Skin Absorption:
This product is not known to be absorbed through the human skin.

Inhalation:
Acute toxic effects are not likely to develop after inhalation from this material.

Chemi Pore

MATERIAL SAFETY DATA SHEET (continued)

SECTION 6 HEALTH HAZARD ASSESSMENT (continued)

Effect of overexposure:

No adverse clinical effects have been associated with exposures to this material.

First Aid procedures:

Skin: Wash material off the skin with soap and water. If redness, itching or a burning sensation develops, get medical attention.

Eyes: Immediately flush with copious amounts of water. If redness, itching or a burning sensation develops, have eyes examined and treated by medical personnel.

Ingestion: Give one or two glasses of water to drink. If gastrointestinal symptoms develop, consult medical personnel. (Never give anything by mouth to an unconscious person.)

Inhalation: Remove victim to fresh air. If cough or other respiratory symptoms develop, consult medical personnel.

SECTION 7 SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Wear respiratory protection during cleanup. Sweep up and recover or mix material with moist absorbent and shovel into waste container. Wash down spill area with water containing detergent and flush away with plenty of water.

Disposal method:

Dispose of virgin (unused) carbon (waste or spillage) in a facility for non-hazardous wastes.

Container disposal:

Do not reuse empty bags. Dispose of in facility permitted for non-hazardous waste.

SECTION 8 SPECIAL PROTECTION INFORMATION

TLV or suggested control value:

The current OSHA and ACGIH limit for dusts which contain more than 1% quartz are as follows for Darco lignite carbons:

Respirable Dust Limit (OSHA and ACGIH)	=	0.7 mg/m^3
Total Dust Limit (OSHA)	=	2.1 mg/m^3
Total Dust Limit (ACGIH)	=	2.0 mg/m^3

Ventilation:

Provide adequate general and local exhaust ventilation to meet suggested control value requirements.

MATERIAL SAFETY DATA SHEET (continued)

SECTION 8 SPECIAL PROTECTION INFORMATION (continued)

Respiratory protection:

If needed, use MSHA-NIOSH approved respirator for dusts, mists and fumes whose TLV is greater than 0.05 mg/m³ or (European) filter 2b.

Protective Clothing:

For personal hygiene purposes use adequate clothing to prevent skin contact.

Eye protection:

Safety glasses with side shields.
Contact lenses should not be worn when working with activated carbon.

Other protective equipment:

Eyewash station in work area.

SECTION 9 SPECIAL PRECAUTIONS OR OTHER COMMENTS

Precautions to be taken in handling or storing:

Activated carbon can be safely stored in any normal storage area, but away from sources of direct heat.

An oxygen deficiency may be created when activated carbon is stored in an enclosed space/silo. Ventilate or wear self-contained breathing apparatus.

Autoignition temp.: Powdered - No generally accepted test method available
Granular - About 450°C (ANSI/ASTM D3466)

All carbonaceous materials will burn under certain conditions and activated carbons are no exception. Activated carbons, however, are not highly flammable and burn slowly without producing smoke or flame.

Extinguishing media:
Water (fog or fine spray), carbon dioxide
Avoid methods which may stir up dust clouds.

Special fire fighting protective equipment:
Self-contained breathing apparatus.

Unusual fire and explosion hazards:
Airborne dust is a weak explosion hazard.
