

MATERIAL SAFETY DATA SHEET

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SECTION 1. CHEMICAL IDENTIFICATION

NAME: GEL FILTRATION PHYTIP COLUMNS

SUBSTANCE: POLYMERS, DEXTRAN, WATER AND SODIUM AZIDE

CAS#: None

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS#: 9003-07-0 POLYPROPYLENE

MF: N.A.

EC Number: Not Assigned SYNONYMS: N.A.

Polypropylene is considered non hazardous.

CAS#: 9004-54-0 DEXTRAN

MF: N.A.

EC Number: 232-677-5 SYNONYMS: NONE

DEXTRAN is considered non hazardous

CAS#: 7732-18-5 WATER

MF: N.A.

EC Number: Not Assigned SYNONYMS: H₂O

WATER is considered non hazardous

CAS#: 26628-22-8 SODIUM AZIDE 0.1% IN WATER

MF: N.A.

EC Number: 247-852-1.

SYNONYMS: Azide, sodium, Natriumazid Sodiumazide SODIUM AZIDE is considered poisonous and hazardous



SECTION 3. HAZARDS IDENTIFICATION

NFPA Ratings POLYPROPYLENE AND DEXTRAN (SCALE 0-4): HEALTH=0-1 FIRE=0-1 REACTIVITY=0 POLYPROPYLENE AND DEXTRAN NON HAZARDOUS OR SLIGHTLY HAZARDOUS

NFPA Ratings SODUM AZIDE (SCALE 0-4) HEALTH=3 FIRE=0 REACTIVITY=3 SODIUM AZIDE HAZARDOUS

CARCINOGEN STATUS:

-OSHA: No. -NTP: No.

-IARC: No.

SECTION 4. FIRST-AID MEASURES

SEEK MEDICAL ASSISTANCE FOR ANY OVEREXPOSURE.

SKIN: Wash thoroughly with soap and water.

EYES: Immediately flush thoroughly with water for at least 15 minutes.

INGESTION: If conscious, drink copious amounts of water. Polymers are not poisonous but may be a choking hazard. Polymers cannot be digested. Water containing sodium azide is poisonous. Never give anything by mouth to an unconscious person. Obtain medical attention.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use extinguishing agents appropriate for surrounding fire.

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Firefighting equipment should be thoroughly decontaminated after use.

UNUSUAL FIRE, EXPLOSION HAZARDS: None known

HAZARDOUS COMBUSTION PRODUCTS: Smoke and noxious gasses, carbon monoxide, carbon dioxide, hydrogen cyanide and other nitrogen containing products evolved upon burning.

EXTINGUISHING MEDIA: Water spray or any class 'A' extinguishing agent.

SECTION 6. ACCIDENTIAL RELEASE MEASURES

Absorb material and collect in an appropriate container for disposal. Wash spill site with soapy water.

SECTION 7. HANDLING AND STORAGE

Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances. Store between 4-20°C, do not freeze.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE LIMITS: No occupational exposure limits established.

CHEMICAL SAFETY GOGGLES.

SAFETY SHOWER AND EYE BATH.

COMPATIBLE CHEMICAL-RESISTANT GLOVES (PVC, RUBBER OR NITRILE).

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

KEEP TIGHTLY CLOSED, KEEP COLUMNS INTACT

STORE BETWEEN 4-20°C.



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY: N.A.

APPEARANCE: Polymers and Water

ODOR: Odorless. BOILING POINT: N.A.

WATER SOLUBILITY: Polymers are insoluble.

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

INCOMPATIBILITIES: Strong oxidizing agents. HAZARDOUS POLYMERIZATION: Will not occur.

DECOMPOSITION PRODUCTS: Water, Carbon Dioxide, Carbon Monoxide. See below for Sodium Azide

decomposition products.

UNUSUAL FIRE, EXPOSION HAZARDS: None known

HAZARDOUS COMBUSTIONS PROUCTS: Smoke and noxious gasses, carbon monoxide, carbon dioxide, and

hydrogen cyanide and other nitrogen containing products evolved upon burning.

SECTION 11. TOXICOLOGICAL INFORMATION SODIUM AZIDE

General:

- a. Dilute solutions of Sodium Azide are used in research laboratories as a preservative. Weak solutions of Sodium Azide (0.1 to 1.0%) are toxic and eye/skin irritants, but at this dilution they generally do not present other physical hazards to the user;
- b. Of greater concern is the use and storage of solutions of >5% or Sodium Azide powder. Use of these materials presents both physical hazards, in the form of shock sensitivity (explosion risk), and health hazards, as Sodium Azide is acutely toxic;

Toxicity:

a. Sodium Azide is acutely toxic by all routes of exposure, similar in toxicity to cyanide. It can cause hypotension, hypothermia, headache, shortness of breath, faintness and convulsions, or death. The oral LD50 (rat) for Sodium Azide is 27 mg/kg and the skin (rabbit) LD50 is 20 mg/kg;

Reactivity:

- a. When mixed with water or an acid, Sodium Azide rapidly hydrolyzes to form hydrazoic acid, a highly toxic and potentially explosive compound;
- b. When heated to ~275°C, Sodium Azide may undergo violent decomposition;
- c. Sodium Azide reacts with lead, copper, silver, gold, and metal halides to form heavy metal azides, which are shock sensitive and more reactive than Sodium Azide itself;
- d. Sodium Azide can easily form explosive compounds in contact with, or when dried on, metal surfaces. It can also react with metal pipe in laboratory plumbing, metal spatulas, and lab equipment to form shock sensitive heavy metal azides; and
- e. If Sodium Azide is introduced to wastewater treatment systems in a large volume or high concentration, the anti-bacterial characteristics of this chemical can damage the water treatment process.



SECTION 12. ECOLOGICAL INFORMATION

Data Not Yet Available.

SECTION 13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

SECTION 14. TRANSPORT INFORMATION

No classification assigned (DOT, Canadian, Land, Air & Maritime).

SECTION 15. REGULATORY INFORMATION

TSCA INVENTORY STATUS: No.

TSCA 12 (b) EXPORT NOTIFICATION: Not listed.

CERCLA SECTION 103 (40CFR302.4): No.

SARA SECTION 302 (40CFR355.30): No.

SARA SECTION 304 (40CFR355.40): No.

SARA SECTION 313 (40CFR372.65): No.

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

ACUTE: No.

CHRONIC: No.

FIRE: No.

REACTIVE: No.

SUDDEN RELEASE: No.

OSHA PROCESS SAFETY (29CFR1910.119): No.

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65: No.

CANADIAN REGULATIONS: Not assigned.

EUROPEAN REGULALTIONS: Not assigned.

SECTION 16. ADDITIONAL INFORMATION

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