

MATERIAL SAFETY DATA SHEET

Section 1 - Product and Company Identification

Product Name: **Zorbax® Extend-C18 Chromatography Column**
Agilent Part Number: **884950-572**
Date Prepared: **12/29/06**
Manufacturer/Distributor's Name: **Agilent Technologies, Inc.**
Logistics Center - Americas
500 Ships Landing Way
New Castle, Delaware 19720

USA Emergency Telephone Number: **1-302-633-8777**

USA Information Telephone Number: **1-877-4Agilent**

European Information Telephone Number: **+49 7243 602 200**

When Calling from Outside the USA You May Also Dial Your International Access Code for the USA, then 1, then 302 633 8777

Section 2 - Composition/Information on Ingredients

A 4.6 x 50 mm HPLC column containing Zorbax® Extend-C18 packing material - a reaction product of a 3.5µm particle size, 80Å pore size Rx-SIL [7631-86-9] porous silica support with a unique bidentate structure. This product has no CAS number assigned.

Chemical Families: Amorphous silica

Chemical Synonyms: Rx-SIL is also known as Rx; Rx silica; Rx-300SIL; and PSM300A

Section 3 - Hazards Identification

Irritating to the eyes and respiratory system. Harmful if inhaled. Do not breathe dust.

Section 4 - First-Aid Measures

Inhalation: Harmful if inhaled. Symptoms of overexposure may include cough and discomfort, difficulty breathing, and/or shortness of breath. If large amounts are inhaled, move affected person to fresh air. If breathing is difficult give oxygen. If breathing has stopped begin resuscitation measures. Contact physician. **Skin Contact:** Wash with soap and water. **Eye Contact:** May be a mild eye irritant. Contamination of the eyes should be treated by immediate and prolonged irrigation with copious amounts of water by separating the eyelids with fingers. If redness or discomfort persists, contact a physician. **Ingestion:** If swallowed, wash out mouth with water provided affected person is conscious. Consult a physician.

Section 5 - Fire-Fighting Measures

Extinguishing Media: Appropriate to surroundings. **Special Fire Fighting Procedures:** Wear full protective clothing and self-contained positive pressure breathing apparatus certified by NIOSH when fighting chemically related fires. **Unusual Fire and Explosion Hazards:** None

Section 6 - Accidental Release Measures

Wearing appropriate personal protective equipment, shovel or sweep up using a dust suppresser. Vacuum the remainder of the smaller quantities using a HEPA-type vacuum. Avoid inhaling dust. Place waste in a plastic bag or other suitable container and dispose of as residual waste. This material is not defined as hazardous waste by RCRA (40 CFR Part 261) and may be land filled according to federal, state and local regulations.

DISCLAIMER: This Safety Data Sheet is offered without charge to the clients of Agilent Technologies. Data is the most current available to Agilent Technologies at the time of preparation and is issued as a matter of information only; no warranty as to its accuracy or completeness is expressed or implied.

Section 7 - Handling and Storage

Do not breathe dust and avoid contact with skin and eyes. Wash thoroughly after handling. Maintain good housekeeping practices. Avoid creating dust. Keep containers closed. Do not store with incompatible materials. Store in a cool, dry place.

Section 8 - Exposure Controls/Personal Protection

Ventilation: Adequate ventilation is required to protect personnel from exposure to chemical vapors or dusts exceeding PEL and to minimize fire hazards. See Section 15 for regulatory standards of exposure. **Respiratory:** Use NIOSH approved respirator equipment. See Section 15.

Eyes: Safety glasses are considered minimum protection. Chemical safety goggles or face shield may be necessary depending on quantity of material and conditions of use. Emergency eye wash fountains should be available in the vicinity of any possible exposure. **Skin:** Chemical-resistant protective gloves and clothing are recommended. The choice of protective gloves or clothing must be based on chemical resistance and other user requirements. Generally BUNA-N offers acceptable chemical resistance. Individuals who are acutely and specifically sensitive to this chemical may require additional protective clothing.

Section 9 - Physical and Chemical Properties

Flash Point (Method Used): **NA** Explosion Potential: LEL (**NA**)/UEL (**NA**)
Specific Gravity (H₂O = 1): **Approx. 2.2 g/cc (bulk density)** Melting Point (Degree F):
>3000
Evaporation Rate (n-butyl acetate = 1) **NA** Boiling Point (Degree F): **>3000**
Vapor Pressure (mm Hg at 25°C): **Negligible** Vapor Density (Air = 1): **NA**
Odor Threshold: **ND** Octanol/Water Partition Coefficient: **NA**
Solubility in Water: Insoluble () / Soluble (**approx. 100 ppm at pH 7**)
Appearance and Odor: **White powder, no odor**

Section 10 - Stability and Reactivity

Stability: Stable (x) / Unstable () **Conditions to Avoid:** NA
Incompatibility (Materials to Avoid): Reacts with hydrofluoric acid (HF)
Hazardous Decomposition or Byproducts: NA
Hazardous Polymerization: May Occur () / Will Not Occur (x)

Section 11 - Toxicological Information

Route(s) of Entry: Inhalation? **Yes** Skin? **No** Ingestion? **Yes**
May be harmful if inhaled or swallowed. Inhalation LC₅₀ (rats): >250 mg/m³ Oral LD₅₀ (rats):
>7500 mg/kg **Health Hazard Acute/Chronic:** This product does not contain crystalline silica (CA), which is considered hazardous by inhalation. This product may cause mild eye irritation with discomfort, tearing or blurring of vision. May cause mild skin irritation. Inhalation may cause temporary lung irritation with cough and discomfort, difficulty breathing or shortness of breath. There are no reports of human sensitization.

Carcinogenicity: NTP? **No** IARC Monographs? **No** OSHA Regulated? **No** OTHER? **No**
Medical Conditions Generally Aggravated by Exposure: Preclude from exposure to dust those persons with preexisting upper respiratory and lung disease such as, but not limited to, bronchitis, emphysema and asthma.

Section 12 - Ecological Information

Persistence/Degradability: ND
Biodegradability: Will not biodegrade
Bioaccumulation: NA

Section 13 - Disposal Considerations

Unused product is not hazardous as defined by RCRA (40 CFR Part 261). Unused material may be land filled as a residual waste according to federal, state and local regulations.

Section 14 - Transport Information**DOT Regulations:****Shipping Name:** Non-regulated Material**RID/ADR:** NA**IATA-DGR Regulations:****Shipping Name:** Non-regulated Material**ADNR:** NA**Section 15 - Regulatory Information****Exposure Limits:** There are no established exposure limits for this product-however if dust is generated by grinding or other means the following standard would apply: *Particulate Matter Not Otherwise Classified: (PNOC)*

OSHA PEL: 5 mg/m3 (Respirable fraction) 15 mg/m3 (Total dust)

ACGIH TWA: 3 mg/m3 (Respirable particulate) 10 mg/m3 (Inhalable particulate)

SARA Reporting: Section 302: None Section 304: None Section 313: None**OSHA Labeling Requirements:** Irritant**Section 16 - Other Information**

Unless otherwise noted, the above information pertains only for the base material and similar types of components in the sample.

When no toxicity data is provided, it is prudent to handle this chemical as hazardous. Furthermore, since individual chemical hypersensitivity cannot be predicted, every chemical should be handled with due respect.

EUROPEAN INFORMATION (Silica)

CAUTION: SUBSTANCE NOT YET FULLY TESTED.

HARMFUL

R 20: Harmful by inhalation.

R 36/37: Irritating to eyes and respiratory system.

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36: Wear suitable protective clothing.

S 22: Do not breathe dust.

KEY TO ABBREVIATIONS**ACGIH** - American Conference of Governmental Industrial Hygienists` **ADNR** - Regulations concerning the carriage of dangerous goods on the Rhine **CAS** - Chemical Abstract Service **DOT** - US Department of Transportation 49 Code of Federal Regulations **IARC** - International Agency for Research on Cancer **IATA-DGR** - International Air Transport Association- Dangerous Goods Regulation **LEL** - Lower Explosion Limit **NA** - Not Applicable **ND** - No Data **NIOSH** - National Institute for Occupational Safety and Health **NTP** - National Toxicology Program **OSHA** - Occupational Safety and Health Administration **PEL** - Permissible Exposure Limit **RID/ADR** - Regulations Concerning the International Carriage of Dangerous Goods by Rail/European Agreement Concerning the International Carriage of Dangerous Goods by Road **TLV** - Threshold Limit Value **TWA** - Time Weighted Average **UEL** - Upper Explosion Limit [] - Indicates CAS Number**Zorbax® is a registered trademark of Agilent Technologies, Inc.**