



SDS: MOLECULAR SIEVES

Rev. Date: 11/13/2015

Section 1. IDENTIFICATION

Product Name: MOLECULAR SIEVES
Product Identifier/Chemical Name: Zeolite Powder Additive
Material Use: F1 FASTCAST®
Supplier/Manufacturer: Goldenwest Manufacturing Incorporated
2036 Nevada City Hwy, Box 573, GV, CA 95945
530 272-1133 Fax 530 272-1070

Emergency Phone: Chemtrec: 800-424-9300

Section 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

no GHS classifications indicated

GHS Label elements, including precautionary statements

GHS Signal Word: **NONE**

no GHS pictograms indicated for this product

GHS Hazard Statements:

no GHS hazards statements indicated

GHS Precautionary Statements:

P281 - Use personal protective equipment as required.

Hazards not otherwise classified (HNOC) or not covered by GHS

Route of Entry: Contact with skin and eyes. Exposure may also occur via inhalation or ingestion if product dust is generated.

Target Organs: Skin, eyes, lungs

Inhalation: Exposure to dust particles generated from this material may cause irritation of the respiratory tract.

Skin Contact: Prolonged skin contact may cause skin irritation. The product gets hot first as it adsorbs water.

Eye Contact: Dust and/or product may cause eye discomfort and/or irritation seen as tearing or reddening.

Ingestion: The product gets hot first as it adsorbs water. Burns to moist body tissue can result if contact is prolonged.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CAS #	%	Chemical Name
1318-02-1	100%	Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites)



SDS: MOLECULAR SIEVES

Rev. Date: 11/13/2015

Section 4. FIRST AID MEASURES

- Inhalation:** Remove to fresh air. If symptoms persist, call a physician.
- Skin Contact:** Wash off with soap and plenty of water. If skin irritation persists, call a physician.
- Eye Contact:** Rinse immediately with plenty of water for at least 15 minutes. If eye irritation persists, consult a physician.
- Ingestion:** Drink at least 2 glasses of water. Obtain medical attention. Never give anything by mouth to an unconscious person.

Section 5. FIRE-FIGHTING MEASURES

- Flammability:** not combustible
- Flash Point:** not applicable

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn. The used product can retain material of a hazardous nature. Identify that material and inform the fire fighters.

In the case of respirable dust and/or fumes, use a self-contained breathing apparatus and dust impervious protective suit.

Section 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions:** For personal protection see section 8.
- Environmental precautions:** No special environmental precautions required.
- Methods for cleaning up:** Sweep, shovel or vacuum spilled product into appropriate containers (do not use vacuum if material has contacted a hydrocarbon material). Pick up and arrange disposal without creating dust. Never return spills in original container for re-use. Spilled product should be disposed of in accordance with all applicable government regulations

Section 7. HANDLING AND STORAGE

- Handling Precautions:** Handle and open container with care. Avoid dust formation. Avoid contact with skin and eyes. Provide an electrical ground connection during loading and transfer operations to avoid static discharge in an explosive atmosphere and to prevent persons handling the material from receiving static shocks. A copy of UOP's booklet "Precautions and Safe Practices for Handling Zeolite Molecular Sieve Adsorbents in Process Units", can be obtained from your UOP representative at no cost.
- Storage Requirements:** Store in the original container. Keep in a dry place.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION



SDS: MOLECULAR SIEVES

Rev. Date: 11/13/2015

Engineering Controls:

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment:

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Personal protective equipment

Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Immersion protection Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: > 480 min Material tested: Dermatril (Aldrich Z677272, Size M)

Splash protection: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: > 30 min Material tested: Dermatril (Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

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SDS: MOLECULAR SIEVES

Rev. Date: 11/13/2015

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White powder	Odor:	None
Physical State:	Powder	Solubility:	No data available
Odor Threshold:	No data available	Freezing/Melting point:	> 400° C
Specific Gravity/Density:	> 2	Flash Point:	No data available
Viscosity:	No data available	Vapor Density:	No data available
Boiling Point:	No data available	Auto-Ignition Temp.	No data available
Partition Coefficient:	No data available	UFL / LFL:	No data available
pH:	No data available		
Evaporation Rate:	No data available		
Decomposition Temp.:	No data available		

Section 10. STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions to Avoid:	When first wetted, the product can heat up to the boiling point of water. Flood with water to cool the material.
Materials to Avoid:	Sudden contact with high concentrations of chemicals having high heats of adsorption such as olefins, HCl, etc.
Hazardous Decomposition:	No decomposition products if used as directed. Hydrocarbons and other materials that contact the product during normal use can be retained on the product. It is reasonable to expect that decomposition products will come from these retained materials of use.
Hazardous Polymerization:	N/A

Section 11. TOXICOLOGICAL INFORMATION

Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites) (1318-02-1) [100%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - > 10,000 mg/kg

Inhalation LC50 Dermal

LD50 LD50 Dermal - rabbit - > 2,000 mg/kg

Other information on acute toxicity no data available

Skin corrosion/irritation: Skin - Human - No skin irritation

Serious eye damage/eye irritation: Eyes - rabbit - No eye irritation

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: Genotoxicity in vitro - Human - lymphocyte Cytogenetic analysis

Genotoxicity in vivo - mouse - Intraperitoneal

Carcinogenicity:

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.



SDS: MOLECULAR SIEVES

Rev. Date: 11/13/2015

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Zeolites crystalline aluminosilicates, composed of silica (SiO₂) and alumina (Al₂O₃), in various proportions plus metallic oxides. Pr)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System): Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. Causes skin irritation. Eyes Causes eye irritation.

Signs and Symptoms of Exposure: prolonged or repeated exposure can cause:, Damage to the lungs. Cough, Difficulty in breathing, Gastrointestinal disturbance, prolonged or repeated exposure can cause:, Damage to the lungs., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional Information:

RTECS: ZG6800000

Section 12. ECOLOGICAL INFORMATION

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Information on ecological effects

Toxicity:

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available



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Section 13. DISPOSAL CONSIDERATION

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for toxicity and possible reactivity prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material. Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioned. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

Section 14. TRANSPORT INFORMATION

DOT/TDG/IATA/IMDG Not dangerous goods

Section 15. REGULATORY INFORMATION

Component (CAS#) [%] - CODES

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Regulatory CODE Descriptions

IARC = IARC Carcinogen Risks

Section 16. OTHER INFORMATION

Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).