

UOP MOLECULAR SEIVE DIVISION -- UOP MOLECULAR SIEVE (SEE SUPPL) -- 6850-01-469-3292

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Product Identification  
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Product ID:UOP MOLECULAR SIEVE (SEE SUPPL)

MSDS Date:02/01/1997

FSC:6850

NIIN:01-469-3292

Status Code:A

MSDS Number: CLHFY

=== Responsible Party ===

Company Name:UOP MOLECULAR SEIVE DIVISION

Address:25 E. ALGONQUIN ROAD

Box:5017

City:DES PLAINS

State:IL

ZIP:60017-5017

Country:US

Info Phone Num:847-391-3189 FAX: 847-391-2953

Emergency Phone Num:847-391-2123

Resp. Party Other MSDS Num.:MSDS REV NO. 7

Preparer's Name:NOT PROVIDED

Chemtrec Ind/Phone:(800)424-9300

CAGE:02QC3

=== Contractor Identification ===

Company Name:SUD-CHEMIE INC/SUB CHEMIE PERFORMANCE PACKAGING DIV

Address:926 SOUTH 8TH ST (FORMALLY HUMIDIAL)

Box:610

City:COLTON

State:CA

ZIP:92324-0610

Country:US

Phone:909-825-1793

Contract Num:SP0450-01-M-ZE71

CAGE:00334

Company Name:UOP LLC

Address:25 E ALGONQUIN RD

Box:City:DES PLAINES

State:IL

ZIP:60017-5017

Country:US

Phone:847-391-3189 FAX: 847-391-2953

CAGE:02QC3

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Composition/Information on Ingredients  
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Ingred Name:SILICON OXIDE (SYNTHETIC)

CAS:112945-52-5

RTECS #:VV7310000

&lt; Wt:50.

Other REC Limits:NOT PROVIDED

OSHA PEL:15 MG/M3 (TDUST)

OSHA STEL:5 MG/M3 (RDUST)

ACGIH TLV:10 MG/M3 (TDUST)

ACGIH STEL:3 MG/M3 (RDUST)

Ingred Name:SODIUM OXIDE

OXIDE (NON-FIBROUS)

CAS:1344-28-1

RTECS #:BD1200000

&lt; Wt:30.

Other REC Limits:NOT PROVIDED

OSHA PEL:15 MG/M3 TDUST

OSHA STEL:5 MG/M3 (RDUST)

ACGIH TLV:10 MG/M3 (TDUST)

ACGIH STEL:3 MG/M3 (RDUST)

Ingred Name:MAGNESIUM OXIDE

CAS:1309-48-4

RTECS #:OM3850000

&lt; Wt:5.

Other REC Limits:NOT PROVIDED

OSHA PEL:15 MG/M3 (TDUST)

ACGIH TLV:10 MG/M3 (FUME)

===== Hazards Identification =====

LD50 LC50 Mixture:NOT PROVIDED

Routes of Entry: Inhalation:NO Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:TARGET ORGAN: PROLONGED OR REPEATED EXPOSURE MAY CAUSE LUNG INJURY. SKIN CONTACT: THE PRODUCT DUST MAY DRY THE SKIN. THIS MATERIAL BECOMES HOT WHEN IT FIRST COMES INTO CONTACT WITH MOISTURE. THE HOT MATERIAL COULD CAUSE THERMAL BURNS. EYE CONTACT: DUST AND/OR PRODUCT MAY CAUSE EYE DISCOMFORT AND/OR IRRITATION SEEN AS TEARING AND REDDENING. INGESTION: THE PRODUCT GETS HOT AS IT

ABSORBS WATER. BURNS TO MOIST BODY TISSUES CAN RESULT IF CONTACT IS PROLONGED. INHALATION: INHALATION OF PRODUCT AND/OR DUST MAY CAUSE IRRITATION OF THE RESPIRATORY TRACT. IRRITATION MAY BE ACCOMPANIED BY COUGHING AND CHEST DISCOMFORT.

Explanation of Carcinogenicity:INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC): SILICON OXIDE (SYNTHETIC) - NOT CLASSIFIABLE AS HUMAN CARCINOGEN (GROUP 3). U.S. NATIONAL TOXICOLOGY PROGRAM (NTP): NEITHER THE PRODUCT NOR THE COMPONENT(S) ARE CLASSIFIED. U.S.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA): NEITHER THE PRODUCT NOR THE COMPONENT(S) ARE CLASSIFIED OR REGULATED.

Effects of Overexposure:SKIN CONTACT: THE PRODUCT DUST MAY DRY THE SKIN. THIS MATERIAL BECOMES HOT WHEN IT FIRST COMES INTO CONTACT WITH MOISTURE. THE HOT MATERIAL COULD CAUSE THERMAL BURNS. EYE CONTACT: DUST AND/OR PRODUCT MAY CAUSE EYE DISCOMFORT AND/OR IRRITATION SEEN AS TEARING AND REDDENING. INGESTION: THE PRODUCT GETS

TS HOT AS IT ABSORBS WATER. BURNS TO MOIST BODY TISSUES CAN RESULT IF CONTACT IS PROLONGED. INHALATION: INHALATION OF PRODUCT AND/OR DUST MAY CAUSE IRRITATION OF THE RESPIRATORY TRACT. IRRITATION MAY BE ACCOMPANIED BY COUGHING AND CHEST DISCOMFORT. Medical Cond Aggravated by Exposure:NOT PROVIDED

===== First Aid Measures =====

First Aid:SKIN CONTACT: WASH AFFECTED AREA WITH SOAP AND WATER. EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES. INGESTION: DRINK AT LEAST 2 GLASSES OF WATER. OBTAIN MEDICAL ATTENTION. INHALATION: REMOVE AFFECTED PERSON TO FRESH AIR. IF RESPIRATORY PROBLEMS DEVELOP, OBTAIN MEDICAL ATTENTION. NOTES TO PHYSICIAN: THIS PRODUCT IS A DESICCANT AND GENERATES HEAT AS IT ABSORBS WATER. THE USED PRODUCT CAN CONTAIN MATERIAL OF A HAZARDOUS NATURE. IDENTIFY THAT MATERIAL AND TREAT SYMPTOMATICALLY.

===== Fire Fighting Measures =====

Flash Point:NOT COMBUSTIBLE.  
Autoignition Temp:Autoignition Temp Text:NP  
Lower Limits:NOT GIVEN  
Upper Limits:NOT GIVEN  
Extinguishing Media:UNUSED MATERIAL WILL NOT BURN. USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.  
Fire Fighting Procedures:NOT PROVIDED  
Unusual Fire/Explosion Hazard:USED MATERIAL MAY CONTAIN MATERIALS OF A HAZARDOUS NATURE. THE USER OF THIS PRODUCT MUST IDENTIFY THE HAZARDS OF THE RETAINED MATERIAL AND INFORM THE FIRE FIGHTERS OF THESE HAZARDS.

===== Accidental Release Measures =====

Spill Release Procedures:LARGE SPILL: ISOLATE THE AFFECTED AREAS AND DENY ENTRY. WEAR EYE, SKIN AND RESPIRATORY PROTECTION. SWEEP, SHOVEL OR VACUUM SPILLED PRODUCT INTO APPROPRIATE CONTAINERS (DO NOT USE A VACUUM IF MATERIAL HAS CONTACTED A HYDROCARBON MATERIAL). SMALL SPILL: SWEEP SPILLED PRODUCT INTO APPROPRIATE CONTAINER. PRODUCT SHOULD BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE GOVERNMENT REGULATIONS.  
Neutralizing Agent:NOT RELEVANT

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===== Handling and Storage =====

Handling and Storage Precautions:STORE IN TIGHTLY CLOSED, PROPERLY LABELED CONTAINERS. A COPY OF UOP'S BOOKLET, " PRECAUTIONS AND SAFE PRACTICES FOR HANDLING MOLECULAR SIEVES IN PROCESS UNITS," M-1001, CAN BE OBTAINED FROM YOUR UOP REPRESENTATIVE AT NO COST.

Other Precautions:NOT PROVIDED

===== Exposure Controls/Personal Protection =====

Respiratory Protection:WHERE NATURAL VENTILATION IS INADEQUATE, USE

MECHANICAL VENTILATION, OTHER ENGINEERING CONTROLS, OR A TOXIC DUST RESPIRATOR ( IN USA - NIOSH/MSHA APPROVED) TO PREVENT INHALATION OF PRODUCT DUST.

Ventilation:WHERE NATURAL VENTILATION IS INADEQUATE, USE MECHANICAL VENTILATION, OTHER ENGINEERING CONTROLS.

Protective Gloves:GLOVES AS NECESSARY TO PREVENT REPEATED OR PROLONGED SKIN CONTACT.

Eye Protection:SAFETY GLASSES OR GOGGLES AS NECESSARY TO PREVENT EYE CONTACT.

Other Protective Equipment:WORK UNIFORM AND GLOVES AS NECESSARY TO PREVENT REPEATED OR PROLONGED SKIN CONTACT.

Work Hygienic Practices:NOT PROVIDED

Supplemental Safety and Health

PRODUCT NAME: MOLECULAR SIEVE TYPE 4A. SUD-CHEME PERFORMANCE P/N: 75040010.

===== Physical/Chemical Properties =====

HCC:B3

NRC/State Lic Num:NOT RELEVANT

Decomp Temp:Decomp Text:NOT PROVIDED

Spec Gravity:1.1PC; 2.1CRYST

pH:8 - 11(SLURRY)

Solubility in Water:NOT AVAILABLE

Appearance and Odor:TAN PELLETS/BEADS, WHITE POWDER OR CAKE, ODORLESS

OR:NONE.

Percent Volatiles by Volume:N/AV

Corrosion Rate:NOT PROVIDED

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

SUDDEN CONTACT WITH HIGH CONCENTRATIONS OF CHEMICALS HAVING HIGH HEATS OF ADSORPTION SUCH AS OLEFINS, HCl, ETC.

Stability Condition to Avoid:THE ADDITION OF MOISTURE (WATER) WITHOUT FLOODING CAN CAUSE RISE IN TEMPERATURE FROM HEAT OF ADSORPTION. CONTACT WITH SKIN MIGHT RESULT IN BURNS.

Hazardous Decompos

ition Products:DECOMPOSITION PRODUCTS FROM THE RETAINED MATERIALS USED, OXIDE OF SILICON, SODIUM, ALUMINUM AND MAGNESIUM.

===== Toxicological Information =====

Toxicological Information:ACUTE ORAL TOXICITY: THE FOLLOWING IS FOR A PRODUCT WITH A SIMILAR COMPOSITION. THE LD50 IS GREATER THAN 5 G/KG (RAT). ACUTE DERMAL TOXICITY: A DERMAL LD50 IS NOT AVAILABLE FOR THIS PRODUCT. ACUTE INHALATION TOXICITY:AN INHALATION LC50 IS NOT AVAILABLE FOR T

HIS PRODUCT. IRRITATION: NOT AVAILABLE. ADDITIONAL TOXICOLOGICAL INFORMATION: A SIMILAR PRODUCT HAS AS EXTREMELY LOW ORDER OF TOXICITY BY SWALLOWING. THIS SIMILAR PELLETS WERE PULVERIZED & SUSPENDED IN SEMI-SOLID AGAR FOR EASE OF ADMINISTRATION. WHEN THE MOLECULAR SIEVE WAS ADMINISTERED BY STOMACH INTUBATION TO MALE RATS, THE ANIMALS SURVIVED MASSIVE DOSES EQUIVALENT TO 32.0 G/K

===== Ecological Information =====

Ecological:AQUATIC TOX

ICITY: NONE KNOWN. WATERFOWL TOXICITY: NONE

KNOWN. BIOCHEMICAL OXYGEN DEMAND: NONE. FOOD CHAIN CONCENTRATION POTENTIAL: NONE EXPECTED.

===== Disposal Considerations =====

Waste Disposal Methods:DISCARD ANY PRODUCT (INCLUDING ANY RETAINED MATERIALS OF USE), DISPOSABLE CONTAINER OR LINER IN AN ENVIRONMENTALLY ACCEPTABLE MANNER, IN FULL COMPLIANCE WITH ALL APPLICABLE GOVERNMENT REGULATIONS.

===== MSDS Transport Information =====

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Transport Information:US DEPARTMENT OF TRANSPORTATION SHIPPING NAME:  
NOT REGULATED. INTERNATIONAL MARITIME ORGANIZATION (IMO): NOT  
REGULATED.

===== Regulatory Information =====

SARA Title III Information:SUPERFUND AMENDMENTS & REAUTHORIZATION ACT  
TITLE III, SECTION 313: THE FOLLOWING COMPONENT(S) OF THIS PRODUCT  
ARE SUBJECT TO RELEASE REPORTING UNDER 40 CFR 302 WHEN A RELEASE  
EXCEEDS THE REPORTABLE QUANTITY (RQ) &/OR THE COMPONENT(S)ARE  
SUBJECT TO THE EMERGENCY PLANNING PROVISIONS OF 40 CFR 355 WHEN  
THERE ARE AMOUNTS PRESENT WHICH ARE EQUAL TO OR GREATER THAN THEIR  
THRESHOLD PLANNING QUANTITY (TPQ) . -NONE-. SUPERFUND AMENDMENTS &  
REAUTHORIZATION ACT TITLE III: NO COMPONENTS OF THIS PRODUCT ARE  
SUBJECT TO EMERGENCY PLANNING BASED ON TPQ`S & RELEASE REPORTING  
BASED ON RQ`S IN 40 CFR 355 (USED FOR SARA 302, 304, 311 & 312).

Federal Regulatory Information:TOXIC SUBSTANCES CONTROL ACT (TSCA):  
ALL

THE INGREDIENTS OF THIS MIXTURE ARE REGISTERED IN THE TSCA CHEMICAL  
SUBSTANCE INVENTORY. THIS PRODUCT (IN ITS FRESH UNUSED STATE) IS  
NOT LISTED BY GENERIC NAME OR TRADEMARK NAME IN THE U.S. EPA  
RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) HAZARDOUS WASTE  
MANAGEMENT REGULATIONS AND DOES NOT POSSESS ANY OF THE FOUR  
IDENTIFYING CHARACTERISTICS OF HAZARDOUS WASTE (IGNITABILITY,  
CORROSIVITY, REACTIVITY, TOXICITY).

State Regulatory Information:STATE COMMUNITY RIGHT-TO-KNOW LEGISLATION:

THE FOLLOWING COMPONENTS OF THIS PRODUCT ARE REGULATED UNDER  
CALIFORNIA`S PROPOSITION 65: NONE.

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies):  
This information is formulated for use by elements of the Department  
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