

GRACE W R AND CO,DAVISON CHEMICAL DIV -- FORMED MOLECULAR SIEVE -- 4440-00-967-3418

===== Product Identification =====

Product ID:FORMED MOLECULAR SIEVE

MSDS Date:10/01/1992

FSC:4440

NIIN:00-967-3418

MSDS Number: BRKJV

=== Responsible Party ===

Company Name:GRACE W R AND CO,DAVISON CHEMICAL DIV

Address:10 E BALTIMORE ST

Box:2117

City:BALTIMORE

State:MD

ZIP:21202-1630

Country:US

Info Phone Num:410-

659-9000

Emergency Phone Num:410-659-9058, 301-874-2009(EVENING)

Preparer's Name:J.H.CONVEY

CAGE:0NAV2

=== Contractor Identification ===

Company Name:GRACE W R AND CO

Address:919 18TH ST NW

City:WASHINGTON

State:DC

ZIP:20006

Country:US

Phone:410-659-9000

CAGE:0NAV2

Company Name:W R GRACE & CO. DAVISON CHEMICAL DIVISION

Address:10 E BALTIMORE STREET

Box:2117

City:BALTIMORE

State:MD

ZIP:21202-1630

Country:US

Phone:410-659-9000

CAGE:16210

===== Composition/Information on Ingredients =====

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Ingred Name:SODIUM ALUMINOSILICATE  
CAS:1344-00-9  
Other REC Limits:NONE RECOMMENDED

Ingred Name:CALCIUM SODIUM ALUMINOSILICATE  
CAS:1344-01-0  
Other REC Limits:NONE RECOMMENDED

Ingred Name:POTASSIUM SODIUM ALUMINOSILICATE  
CAS:12736-96-8  
Other REC Limits:NONE RECOMMENDED

Ingred Name:CLAY (MAGNESIUM ALUMINOSILICATE)  
CAS:1332-58-7  
RTECS #:GF1670500  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:2 MG/M3 TDUST; 9293

Ingred Name:QUARTZ  
CAS:1408-60-7  
Fraction by Wt: 2-3%  
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:ORAL LD50 (RAT) IS >31,600 MG/KG  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:AVOID PROLONGED BREATHING OF DUST OR CONTACT OF DUST WITH SKIN. THE DRYING ACTION OF THIS MATERIAL CAN CAUSE IRRITATION OF MUCOUS MEMBRANES OF NOSE AND THROAT AND IRRITATION OF SKIN. IF ITS USE REQUIR ES MANUAL HANDLING, WEAR LONG SLEEVES AND CLOSE-WEAVE COTTON GLOVES WITH TIGHT FITTING WRISTLETS.  
Explanation of Carcinogenicity:QUARTZ IS LISTED BY IARC AS CLASS 2A CARCINOGEN.  
Effects of Overexposure:EYES: IRRITATION FROM DUST. SKIN: IRRITATION, DRYING. INHALATION: DUST MAY CAUSE DRYNESS AND IRRITATION OF MUCOUS MEMBRANES OF MOUTH AND THROAT. INGESTION: NOT CONSIDERED A POTENTIAL SOURCE OF EXPOSUR E.  
Medical Cond Aggravated by Exposure:MANUFACTURER KNOWS OF

NO MEDICAL

CONDITIONS ABNORMALLY AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

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

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. SKIN: WASH AREA WITH SOAP AND WATER. INHALATION: MOVE TO FRESH AIR. INGESTION: MATERIAL WILL PASS THROUGH THE BO DY NORMALLY.

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

Flash Point:NON FLAMMABLE

Extinguishing Media

:MATERIAL IS NOT FLAMMABLE. USE APPROPRIATE MEDIA TO FIGHT SURROUNDING FIRE.

Fire Fighting Procedures:NONE SPECIFIED BY MANUFACTURER.

Unusual Fire/Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.

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

Spill Release Procedures:VACUUM, SWEEP UP OR FLUSH TO SEWER TREATED FOR SUSPENDED SOLIDS REMOVAL. KEEP DUST TO A MINIMUM.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

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Handling and Storage Precautions:KEEP CONTAINERS TIGHTLY SEALED. WEAR GOGGLES WHEN TRANSFERRING PRODUCT WITH HIGH PRESSURE AIR. PROPERLY GROUND TRANSFER SYSTEM AND RECEIVING VESSELS.

Other Precautions:WILL RELEASE HEAT WHEN ABSORBING WATER; SIEVES CAN BECOME HOT ENOUGH TO CAUSE THERMAL BURNS OF THE SKIN. WHEN POURING THIS MATERIAL INTO A CONTAINER OF FLAMMABLE LIQUID, GROUND BOTH CONTAINERS TO PREV ENT A STATIC ELECTRIC SPARK.

===== Exposure Control  
s/Personal Protection =====

Respiratory Protection:IF DUSTY CONDITIONS PREVAIL, USE OF AN APPROVED NIOSH/MSHA DUST MASK IS RECOMMENDED.

Ventilation:PROVIDE NORMAL ACCEPTABLE WORK AREA VENTILATION.

Protective Gloves:CLOSE-WEAVED COTTON GLOVES.

Eye Protection:GOGGLES WHEN AIR TRANSFERRING SIEVES.

Other Protective Equipment:WEAR CLOTHING NECESSARY TO MINIMIZE SKIN CONTACT WITH THE MATERIAL.

Work Hygienic Practices:WASH AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING.

Su

## pplemental Safety and Health

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

HCC:N1

Spec Gravity:2.1

pH:10.4

Solubility in Water:INSOLUBLE

Appearance and Odor:WHITE, GRAY, OR TAN BEADS. ODORLESS.

Percent Volatiles by Volume:NIL

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

Stability Indicator/Materials to Avoid:YES

REACTS WITH HYDROGEN FLUORIDE, STRONG ACIDS, OR ALKALI.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposi

tion Products:NONE SPECIFIED BY MANUFACTURER.

### ===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF WASTE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. FOLLOWING CONTACT WITH PETROCHEMICALS OR GASES, MOLECULAR SIEVES MUST BE HANDLED WITH SPECIAL PRECAUTIONS.MOLECULAR SIEVES AND RETAINED MATERIAL CAN BE FLAMMABLE ANDTOXIC.

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