

W.R.GRACE & CO./DAVISON CHEMICAL DIVISION -- GRADES 542 AND 544(MOLECULAR SIEVE) --  
6850-00-865-2418

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

Product ID:GRADES 542 AND 544(MOLECULAR SIEVE)

MSDS Date:10/19/1987

FSC:6850

NIIN:00-865-2418

MSDS Number: BFTDP

=== Responsible Party ===

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

Address:10 E BALTIMORE ST

Box:2117

City:MD

ZIP:21203

Info Phone Num:3

01-659-9000

Emergency Phone Num:301-659-9058

Preparer's Name:J.H.CONVEY,MGR

CAGE:MO123

=== Contractor Identification ===

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

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

Address:10 E BALTIMORE ST

Box:2117

City:MD

ZIP:21203

Phone:301-659-9000

CAGE:MO123

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

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Ingred Name:SODIUM ALUMINOSILICATE  
CAS:1344-00-9  
Other REC Limits:5MG/CUM (RESP.DUST)  
OSHA PEL:5MG/CUM (RESP.DUST)  
ACGIH TLV:5MG/CUM (RESP.DUST)

Ingred Name:CALCIUM SODIUM ALUMINOSILICATE  
CAS:1344-01-0  
Other REC Limits:5MG/CUM (RESP.DUST)  
OSHA PEL:5MG/CUM (RESP.DUST)  
ACGIH TLV:5MG/CUM (RESP.DUST)

Ingred Name:POTASSIUM SODIUM ALUMINOSILICATE  
CAS:12736-96-8  
Other REC Limits:5MG/CUM (RESP.DUST)  
OSHA PEL:5MG/CUM (RESP.DUST)  
ACGIH TLV:5MG/CUM (RESP.DUST)

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Hazards Identifi  
cation =====

LD50 LC50 Mixture:LD50 ORAL RAT=31600MG/KG  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:NO KNOWN HAZARDS IN RANGE NORMALLY  
ENCOUNTERED IN INDUSTRY. VERY LOW ORAL AND INHALATION TOXICITY.  
EYES:IRRITATION;SKIN:IRRITATION ON PROLONGED  
CONTACT;INHALATION:DRYING OF THE MUCOUS MEMBRANES OF THE NOSE AND  
THROAT.  
Effects of Overexposure:SEE HEALTH HAZARDS.  
Medica  
I Cond Aggravated by Exposure:NONE NOTED.

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First Aid Measures =====

First Aid:EYES:IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER.GET  
MEDICAL ATTENTION IMMEDIATELY;SKIN:WASH WITH SOAP AND  
WATER;INHALATION:REMOVE TO FRESH AIR;INGESTION:MATERIAL WILL PASS  
THROUGH THE BODY NORMALLY .

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Fire Fighting Measures =====

Extinguishing Media:USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING  
FIRE.

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

Spill Release Procedures:VACUUM OR SWEEP UP.

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

Handling and Storage Precautions:KEEP CONTAINERS TIGHTLY CLOSED.WHEN TRANSFERRING BEADED MOLECULAR SIEVES WITH HI PRESS.AIR,WEAR GOGGLES.GROUND TRANSFERRING & RECEIVING VESSELS.

Other Precautions:MALFUNCTION OF EQUIPMENT CAN PROPEL BEADS WITH ENOUGH VELOCITY TO PENETRATE THE SKIN.MOL.SIEVES WILL RELEASE HEAT WHEN

ADSORBING WTR.IF A LG QUANTITY OF SIEVE QUICKLY ADSORBS WTR,THE SIEVES CAN BECOME HOT ENOUGH TO CAUSE SKIN BURNS.BEWARE!

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

Respiratory Protection:IF DUSTY CONDITIONS DEVELOP,USE NIOSH-APPROVED RESPIRATOR.

Ventilation:AS REQUIRED TO CONTROL TLV IN AIR.

Protective Gloves:CLOSE-WEAVE GLOVES W.TIGHT-FIT WRISTLETS

Eye Protection:SAFETY GOGGLES.

Other Protective Equipment:WORK CLOTH COVERING ARMS,LEGS TO PREVENT PR

OLONGED SKIN CONTACT.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING.REMOVE & LAUNDER CONTAMINATED CLOTHING.

Supplemental Safety and Health

FOLLOWING CONTACT WITH TYPICAL PETROCHEMS OR GASES,MOLECULAR SIEVES MUST BE HANDLED WITH SPECIAL PRECAUTIONS.THE COMBINATION OF MOLECULAR SIEVES AND RETAINED MATERIAL CAN BE FLAMMABLE AND TOXIC.CARE SHOULD BE TAKEN TO AVOID IGNITION SOURCES AND PERSONAL CONTACT.

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

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HCC:N1

Spec Gravity:2.1

pH:10.4

Solubility in Water:NEGLIGIBLE

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

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

Stability Indicator/Materials to Avoid:YES

HF,STRONG ACIDS OR ALKALI

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

Waste Disposal Methods:LANDFILL IAW FEDERAL,STATE & LOCAL REGULATIONS.COVER TO AVOID BLOWING OF DUST. USE APPROVED DISPOSAL METHODS SUITABLE FOR TOXIC WASTES.

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