

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: Duplivest Powder
Product Number: 805049
Chemical Name: Silicon Dioxide
Chemical Family: Colloidal Silica
CAS Number: Blend

Company Identification

Niranium Co., Div. of CMP Industries LLC
413 North Pearl St
Albany, NY 12207-1311 USA
(518)-434-3147 (For product information)
(800)-424-9300 (For emergencies)
1-800-424-9300 or 1-202-483-7616 (CHEMTREC)

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>
MAGNESIUM OXIDE	40.0 - 90.0 %	1309-48-4
CRYSTALLINE QUARTZ, DUST	0.0 - 20.0 %	14808-60-7
CRYSTALLINE SILICA	21.0 %	14464-46-1

(See Section 8 for exposure guidelines)

(See Section 15 for regulatory information)

HAZARDS DISCLOSURE

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

As defined under Sara 311 and 312, this product contains materials that are acute, chronic hazards.



3. HAZARDS IDENTIFICATION

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***** EMERGENCY OVERVIEW *****
*
*                               WARNING                               *
*
* May cause skin, eye, or respiratory tract irritation. Cancer hazard.
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POTENTIAL HEALTH EFFECTS

EYE:

Causes eye irritation. may cause conjunctivitis.

SKIN:

Allergic reactions are possible. May cause drying, and chapping dermatitis.

INHALATION:

Individuals with preexisting diseases of the lungs may have increased susceptibility. Vapors may be slightly irritating to respiratory tract.

INGESTION:

Irritating to mouth, throat, and stomach. Ingestion is not considered a potential route of exposure.

CHRONIC EFFECTS:

Repeated and prolonged exposure may lead to delayed injury to the lungs (Silicosis, Pneumoconiosis).

REPRODUCTIVE HAZARDS:

None.

CARCINOGENICITY INFORMATION:

Crystalline Silica is listed by NTP as a carcinogen.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Any pre-existing respiratory or Pulmonary disease or condition, such as, but not limited to, Bronchitis, Emphysema & Asthma.

4. FIRST AID MEASURES

EYE CONTACT FIRST AID:

Wash carefully with warm water.



(section 4 continued)

SKIN CONTACT FIRST AID:

Wash exposed area & remove affected clothing.

INHALATION FIRST AID:

If breathing is difficult, remove to fresh air and provide oxygen. Seek medical attention.

INGESTION FIRST AID:

Get immediate medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

COC Flash Point: N/A

Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR

LEL: None

UEL: None

FLAMMABLE PROPERTIES:

Not Flammable.

EXTINGUISHING MEDIA:

Use extinguishing media appropriate for surrounding fire.

FIRE & EXPLOSION HAZARDS:

None.

FIRE FIGHTING INSTRUCTIONS:

Avoid breathing smoke, fumes, and decomposition products. As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear.

COMBUSTION PRODUCTS:

None.

6. ACCIDENTAL RELEASE MEASURES

SAFEGUARDS (PERSONNEL):

Wear appropriate personal protective equipment.

LARGE SPILLS PROCEDURE:

Clean - up with dustless method (use vacuum or wet sweeping) provide ventilation.



(section 6 continued)

SMALL SPILLS PROCEDURE:

Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

7. HANDLING AND STORAGE

HANDLING (PERSONNEL):

Avoid inhalation and ingestion of this material. Avoid eye contact.

HANDLING (PHYSICAL ASPECTS):

Store in a cool dry area.

STORAGE PRECAUTIONS:

Store in a cool dry place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:

If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

EYE / FACE PROTECTION REQUIREMENTS:

Chemical goggles are recommended to avoid contact with eyes.

SKIN PROTECTION REQUIREMENTS:

Wear protective gloves to minimize skin contamination. Wash hands thoroughly after handling.

RESPIRATORY PROTECTION REQUIREMENTS:

Atmospheric levels should be maintained below the exposure guideline.

EXPOSURE GUIDELINES:

MAGNESIUM OXIDE

OSHA Ceiling Limit: 20 ppm, 80 mg/m³

CRYSTALLINE QUARTZ, DUST

OSHA PEL: 50 ppm

OSHA TWA: 50 ppm

OSHA Ceiling Limit: 1 ppm, 3 mg/m³



9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Granular Particles
COLOR: Sand
ODOR: None
BOILING POINT: 4000 F
SOLUBILITY IN WATER ...: Insoluble
SPECIFIC GRAVITY: 2.65 (Water = 1)

10. STABILITY AND REACTIVITY

STABILITY:

Stable.

POLYMERIZATION:

Product will not undergo polymerization.

INCOMPATIBILITY WITH OTHER MATERIALS:

Reacts with Hydrochloric Acid, powerful oxidizing agents, strong acids and strong alkalis.

DECOMPOSITION:

Silica will dissolve in Hydrofluoric acid and produce a corrosive gas, Silicon tetrafluoride.

11. TOXICOLOGICAL INFORMATION

CHRONIC EFFECTS /:

May cause respiratory disease.

MAGNESIUM OXIDE

Test Code: TCLO
Species: Human
Results: 400 mg/kg

CRYSTALLINE QUARTZ, DUST

Test Code: TCLO
Species: Human
Results: 6 mppcf/17.9 yrs. produces pulmonary fibrosis, cough and difficult breathing.

QUARTZ (SiO₂)

Test Code: LCLO
Species: Human
Results: 300 micrograms/m³/10 yr effects the liver.



12. ECOLOGICAL INFORMATION

MISCELLANEOUS:

Dike and contain spill with absorbent material such as clay or commercial absorbent.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Dispose of waste material in accordance with all local, state/provincial, and national requirements.

14. TRANSPORTATION INFORMATION

PRODUCT LABEL: Duplivest Powder
D.O.T. SHIPPING NAME: N/A
TECHNICAL SHIPPING NAME ...: N/A
D.O.T. HAZARD CLASS: N/A
UN NUMBER: N/A

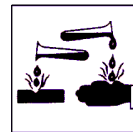
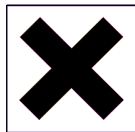
15. REGULATORY INFORMATION

REGULATORY LISTS SEARCHED:

01 = SARA 313	02 = CA Proposition 65
03 = SARA 302/304	04 = CERCLA 302.4
05 = ACGIH TWA	06 = ACGIH STEL
07 = ACGIH CALC TLV	08 = OSHA PEL
09 = CANADIAN WHMIS	10 = OSHA Ceiling

EEC Symbols and Indications of Danger:

Irritant (Xi), Corrosive (C)



R-Phrases:

R34 - Causes burns.
R36/38 - Irritating to eyes and skin.
R20/22 - Harmful by inhalation and if swallowed.



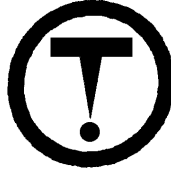
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S-Phrases:

S24/25 - Avoid contact with skin and eyes.
S46 - If swallowed, seek medical advice immediately and show this container or label.

WHMIS Hazard Symbols:

Class D2 - Materials Causing Other Toxic Effects



Canadian Disclosure List

MAGNESIUM OXIDE (1309-48-4)
CRYSTALLINE QUARTZ, DUST (14808-60-7)
CRYSTALLINE SILICA (14464-46-1)

SARA Title III - Section 313

CRYSTALLINE QUARTZ, DUST (14808-60-7) --

16. OTHER INFORMATION

PREPARED BY: Ylvonne Thomas
APPROVED BY: Abdul Khan
TITLE: Q. C. Manager
APPROVAL DATE: April 17, 2003
SUPERCEDES DATE ...: August 14, 1997
MSDS NUMBER: 805049
RTN NUMBER: 00000026 (Official Copy)

ABBREVIATIONS USED IN THIS MSDS:

TLV - THRESHOLD LIMIT VALUE	TWA - Time Weighted Average
STEL - SHORT TERM EXPOSURE LIMIT	TPQ - Threshold Planning Quantity
RQ - REPORTABLE QUANTITY	PEL - Permissible Exposure Limit
C - CEILING LIMIT	CAS - Chemical Abstract Service Number
NDA - NO DATA AVAILABLE	N/A - Not Applicable or Not Available

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END OF MSDS

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