

Identity (As used on Label and List)

Feldspar F-4, 170 & 200 mesh

Section I:

Manufacturer's Name UNIMIN CORPORATION	Emergency Telephone Number {203} 966-8880
Address (Number, Street, City, State and ZIP Code) 258 Elm Street New Canaan, CT 06840	Telephone Number for Information {203} 966-8880 Date Prepared May 6, 1988

Section II: Hazardous Ingredients/Identity Information

Components and Hazardous Components (Specific Chemical Identity; Common Name(s): Feldspar F-4, 170 & 200 mesh

	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Feldspar	-not established-	5mg/M ³ (Resp.)		approx. 93-94%
Free Silica (Quartz)				approx. 6-7%

OSHA PEL: Exposure to airborne crystalline silica shall not exceed an 8-hour time-weighted average limit as stated in 29 CFR § 1910.1000 Table Z-3 for Mineral Dusts, specifically "Silica: Crystalline: Quartz (respirable)."

	Mppcf	Mg/M ³
Crystalline Quartz (Respirable)	$\frac{250}{\% \text{ SiO}_2 + 5}$	$\frac{10 \text{ mg/M}^3}{\% \text{ SiO}_2 + 2}$
Quartz (Total Dust)		$\frac{30 \text{ mg/M}^3}{\% \text{ SiO}_2 + 2}$

ACGIH TLV: Crystalline Quartz
 TLV-TWA = 0.1 mg/M³ (respirable dust)
 See Threshold Limit Value and Biological Exposure Indices for 1987-1988
 American Conference of Governmental Industrial Hygienists.

NIOSH has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (50 ug/M³) averaged over a work shift of up to 10 hours per day, 40 hours per week. The NIOSH Criteria Document for Crystalline Silica should be consulted for more detailed information.

Section III: Physical/Chemical Characteristics

Boiling Point	4046°F	Specific Gravity (H ₂ O=1)	2.65
Vapor Pressure (mm Hg.)	N/A	Melting Point	2930°F
Vapor Density (AIR=1)	N/A	Evaporation Rate (Butyl Acetate=1)	N/A
Solubility in Water	Insoluble		
Appearance and Odor	White Crystals--Odorless		

Waste Disposal Method:

If uncontaminated, dispose as an inert, non-metallic mineral. If contaminated-- use appropriate method in light of contamination in accordance with Federal, State, and local laws.

Precautions to Be Taken in Handling and Storing:

Take normal precautions against bag breakage or spills of bulk material. Avoid creation of respirable dust.

Other Precautions:

Use adequate ventilation and dust collection. Do not permit dust to accumulate in work area. Maintain and use proper and clean respiratory equipment. Clean clothing which has become dusty. See Section VIII. WARN and TRAIN your EMPLOYEES and WARN your CUSTOMERS (in the event of resale) in accordance with all applicable Federal and State "Right to Know" laws and regulations.

////////////////////Section VIII: Control Measures////////////////////

Respiratory Protection (Specify Type):

Use conventional particulate respiratory protection based on considerations of airborne concentrations and duration of exposure. See most recent standards of the American National Standard Institute (ANSI Z.88.2), the Occupational Safety and Health Administration (OSHA) (29 CFR Part 1910.134) and the Mine Safety and Health Administration (MSHA) (30 CFR Part 56).

Ventilation	Local Exhaust: To meet PEL requirements	Special: N/A
	Mechanical (General): To meet PEL requirements	Other: To meet other PEL requirements
Protective Gloves: Recommended	Eye Protection: Recommended	

Other Protective Clothing or Equipment:

As appropriate in light of specific application.

Work/Hygienic Practices:

Avoid creating and breathing dust.

THE DATA IN THIS MATERIAL SAFETY DATA SHEET RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS. THE INFORMATION SET FORTH HEREIN IS BASED ON TECHNICAL DATA THAT UNIMIN CORPORATION BELIEVES RELIABLE. IT IS INTENDED FOR USE BY PERSONS HAVING TECHNICAL SKILL AND AT THEIR OWN DISCRETION AND RISK. SINCE CONDITIONS OF USE ARE OUTSIDE OUR CONTROL, WE MAKE NO WARRANTIES, EXPRESSED OR IMPLIED, AND ASSUME NO LIABILITY IN CONNECTION WITH ANY USE OF THIS INFORMATION. NOTHING HEREIN IS TO BE TAKEN AS A LICENSE TO OPERATE UNDER OR A RECOMMENDATION TO INFRINGE ANY PATENTS. ANY USE OF THESE DATA AND INFORMATION MUST BE DETERMINED BY THE USER TO BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.