



MATERIAL SAFETY DATA SHEET



Section I: Product Identification

Product Name FORMULA 2	NOTE: Do not leave fields on blank. If a question does not apply or is not stated, it is necessary to identify according the following: applicable N/E: Not stated N/A: Non applicable
No. CAS Non applicable. List of individual components in section 3.	

Section II: Manufacturer Identification

Manufacturer Name MACESA REFRACTARIO	In case of emergency call: (01152) 81 24 8219
Address: BOULEVARD DIAZ ORDAZ Km. 335.5 GARZA GARCIA, N.L. MEXICO CP 66230	For further information call: (01152) 81 24 82 35
	Creation date: 01/02/2012
	Signature
Distributor Name Dal-tile México	Distributor Phone Number: (01152) 81 24 82 34 / 28

Section III: Hazardous components

	Component Name	No. CAS/#EINECS	Concentration (%)	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)	Other recommended limits
1	Silica in quartz form	14808-60-7/238-878-4	9.5%	10 mg/m3 (Breath.)	0.05 mg/m3 (Breath.)	N/E
2	Muscobite	12001-26-2	3.4%	20 ppm (Breath.)	3 mg/m3 (Breath.)	N/E
3	Titanium Dioxide	13463-67-7/236-675-5	4.4%	15 mg/m3 (Total)	10 mg/m3 (Resp)	N/E
4	Aluminum silicate	1318-74-7/215-286-4	10.0%	5 mg/m3 (Breath.)	2 mg/m3 (Breath.)	N/E
5	Talc	14807-96-6	17.5%	2 mg/m3 (Breath.)	2 mg/m3 (Breath.)	N/E
6	Mullite	1302-93-8	24.3%	15 mg/m3 (Breath.)	2 mg/m3 (Breath.)	N/E
7	Amorphous Silica	7631-86-9	19.5%	80 mg/m3 (Breath.)	10 mg/m3 (Breath.)	N/E
8	Kyanite	1302-76-7	0.4%	10 mg/m3 (Breath.)	0.1 mg/m3 (Resp)	N/E
9	Cristobalite	14464-46-1	5.4%	10 mg/m3 (Breath.)	0.025 mg/m3 (Resp)	N/E

Section IV: Chemical and Physical Characteristics

Bolling Point	N/A	Specific gravity (H ₂ O = 1)	N/S
Vapor Pressure (mmHg)	N/A	Fusion Point	N/S
Vapor Density (Aire = 1)	N/A	Evaporation rate (Butylacetate = 1)	N/A

Water Solubility: Dust	Appearance and odor: Gray
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Section V: Fire and Explosion

Flash Point (Include method to determinate) N/A	Flamability limits	Lower N/A	Upper N/A
Extinguish media No risk of fire			
Special procedures for firefighting No risk of fire			
Unusual and explosion hazards Not required			

Section VI: Reactivity

0-015

Unstable	N/A	Conditions to avoid
Stable	Stable	N/A
Incompatibility (Materials to avoid) N/A		
Hazardous degradation products: Under normal conditions, this product does not release materials after application		
Polymerization risk:	N/A	Conditions to avoid: N/A

Section VII: Health risks

Exposure type:	Inhalation Yes	Skin Yes	Ingestion NO
Health risks (Acute and Chronic)			
Acute: The overexposure to dust of the product may cause irritation of eyes, skin and respiratory tract.			
Chronic: The excessive inhalation of crystalline silica may cause silicosis.			
The International Agency for Research on Cancer concluded that there is evidence of carcinogenesis in persons by crystalline silica in quartz form from occupational sources.			
Cancer Risk	NTP? NO	IARC NO	OSHA NO
Exposure symptoms The excessive exposure to dust during application without proper personal protection equipment, may cause irritation in the eyes, skin and respiratory tract.			
Medical conditions aggravated by exposure Workers with deficient respiratory capacity must have limited exposure to this material.			

Section VIII: First Aid Measures

Emergency procedures and first aid Skin: wash with clean water and soap in the affected area. Inhalation: Withdraw the affected person from exposure and move to a fresh and clean air area, if breathing has stopped, provide artificial respiration. Request medical attention immediately. Ingestion: Request medical attention immediately. Eyes: Withdraw the person from the exposure and rinse the eye with substantial quantities of clean water, lifting the upper lid and lowering the inferior lid, repeat several occasions. If irritation persists, get medical attention.

Section IX: Procedures for Safe Use and Handling

Procedure in case of spills

Use the proper personal protection equipment. Do not dry sweep, proceed with recollection with a method that eliminates dust generation (which can be vacuum or wet methods).

Section X: Disposal Considerations

Disposal Method

Put the material in appropriate identified recipients and dispose according federal, state and local regulations.

Section XI: Handling and Storage

Handling and Storage Precautions

Operate in presence of a localized vacuum, using adequate protection tools. Avoid skin or eye contact, do not drink, eat or smoke while handling the material.

Other precautions

Use gloves to handle

Section XII: Personal Protection Equipment

Respiratory protection (specify type):

Approved by NOISH for dust and mist

Ventilation:

Use proper ventilation to keep exposure under the recommended limits. Avoid inhaling dust. The major probability of silica exposure occurs during dry conditions. Wet methods are recommended.

Eyes

Use protection glasses or goggles. Do not use contact lense in the work area.

Skin

Use cotton gloves or leather to minimize skin exposure. Wash hands with water and soap before eating, drinking or smoking, and after the working day or after working with varnish.

Other cloaths or equipment

Note: The information of personal protection in this document is based on general information under normal conditions. In case of special or unusual conditions, it is suggested the assistance of a qualified security professional.

Section XIII: Regulations

SARA Report

N/A

(TSCA)

The components of this product have been introduced in the US commerce and are listed in the TSCA (Toxic Substance Control Act) inventory.

Section XIV: Transportation

Transportation regulations (DOT)

This material is considered as NON HAZARDOUS for terrestrial or areal transportation, but due to the particle size of its components, dust generations must be avoid during transportation.