



SAFETY DATA SHEET

M/M 451

Revision N°: 4
 Revision date: 09/24/2019
 Supersedes Revision: 02/10/2015
 Document N°: EHS0200-1-0451

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: M/M Grade 451 **Product Code:** 22015 **CAS Number:** NA

Manufacturer Information

Crystex Composites, LLC
 Mykroy/Mycalex Ceramics
 125 Clifton Boulevard
 Clifton, NJ 07011
 (973) 779-8866
<http://crystexllc.com>

Emergency Contact: Safety Officer – (973)779-8866
Email address: jsaenz@crystexllc.com
Information: Safety Officer – (973)779-8866

2. HAZARDS IDENTIFICATION

GHS Classification	Placard	Key word	GHS hazard phrase
Respiratory Sensitization, Category 1B	Health hazard	Danger	May cause allergy or asthma symptoms or breathing difficulties if inhaled

Hazard Phrases

Harmful if inhaled.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

GHS Precaution Phrases

Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray.
 In case of inadequate ventilation, wear respiratory protection.

GHS Response Phrases

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.

GHS Storage and Disposal Phrases

Dispose of contents/container to unregulated waste.

Target Organs

Cardiovascular system, Eyes, Gastrointestinal System, Heart, Lungs, Respiratory system, Muscles, Skin.

Potential Health Effects (Acute and Chronic)

Mica is not listed as a carcinogen by OSHA, NTP, or IARC. However, IARC concludes that there is limited evidence of carcinogenicity of crystalline silica to humans. Excessive inhalation of dusts may cause lung injury with symptoms including shortness of breath and reduced pulmonary function. Persons with pre-existing respiratory disorders may be at an increased risk from exposure.

Inhalation

Inhalation of this material, particularly dust, may cause upper respiratory and mucous membrane irritation. Even though this M/M material grade - which is made from natural mica (Muscovite) - contains fluorine ions, these ions are unlikely to leach out of formulation due to the high heat used in manufacturing process.

Skin Contact

Even though Muscovite particles are large and insoluble in water, it may cause drying of the skin.

Eye Contact

Contact may cause mechanical irritation with redness, tearing and pain.

Ingestion

If ingestion occurs, muscle spasm, slow pulse, extra systoles, hyperkalemia may occur.

Medical Conditions Generally Aggravated By Exposure

None.



**Respiratory
Tract Irritant**



SAFETY DATA SHEET

M/M 451

Revision N°: 3
Revision date: 2/10/2015
Supersedes Revision: 6/28/2014
Document N°: EHS0200-1-0451

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Chemical Name)	CAS NUMBER	Concentration
1. Muscovite	1318-94-1	55-58%
2. Frits, chemicals	65997-18-4	39-41%
3. Potassium fluorosilicate	16871-90-2	4-6%

4. FIRST AID MEASURES

Emergency and First Aid Procedures

If exposure occurs, move to fresh air. Call a physician.

In Case of Inhalation

If an adverse reaction is observed or irritation develops, remove the person from source of exposure to fresh air. If symptoms persist get medical attention.

In Case of Skin Contact

Wash the exposed skin with soap and water. If irritation or rash develops get medical attention.

In Case of Eye Contact

If dust enters eyes, flush immediately with clean water for 15 minutes and call a physician.

In Case of Ingestion

Clear material from mouth. If large amounts of material are swallowed seek medical attention. No harmful effects are expected from a small ingestion.

Signs and Symptoms Of Exposure

Signs and symptoms of exposure include upper respiratory irritation, gastrointestinal irritation, muscle spasm, extra systoles, bradycardia (slow pulse), hypokalemia (low potassium), and skin and eye irritation, burns.

5. FIRE FIGHTING MEASURES

Flash Point: NA **Auto ignition Point:** NA
Explosive Limits: NA **LEL:** NA **UEL:** NA

Fire Fighting Instructions

Wear positive pressure, self-contained breathing apparatus for firefighting. Use structural firefighting clothing.

Flammable Properties and Hazards Suitable Extinguishing Media

This material is not flammable or combustible but rather becomes molten. Use any media appropriate for the surrounding fire, water fog, carbon dioxide, foam or dry chemical.

Unsuitable Extinguishing Media

NA

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled

Wear appropriate protective clothing and equipment. Sweep or vacuum up, avoiding the creation of airborne dust, and collect in a suitable container for disposal. Dust collectors may be used as well.

Protective Precautions, Protective Equipment and Emergency Procedures

Use a NIOSH approved dust/mist respirator if dust is created.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling

Avoid generating and breathing dust. Avoid eye contact. Use with adequate ventilation. If clothing becomes contaminated, remove and launder before reuse. Wash thoroughly before eating and drinking.

Food, beverages and smoking materials should not be allowed in the work area.

Precautions To Be Taken in Storing

Store in a dry area away from food and feed products. Avoid dust formation.



SAFETY DATA SHEET

M/M 451

Revision Nº: 3
 Revision date: 2/10/2015
 Supersedes Revision: 6/28/2014
 Document Nº: EHS0200-1-0451

Other Precautions

Mica is not listed as a carcinogen by OSHA, NTP, or IARC. However, IARC concludes that there is limited evidence of carcinogenicity of crystalline silica to humans. Excessive inhalation of dusts may cause lung injury with symptoms including shortness of breath and reduced pulmonary function.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Hazardous Components (Chemical Name)	CAS NUMBER	OSHA PEL	ACGIH TLV
1. Muscovite	1318-94-1	3 mg/m ³	3 mg/m ³ (as respirable fraction)
2. Frits, chemicals	65997-18-4	15 mg/m ³ (as total dust)	10 mg/m ³ (as total dust)
3. Potassium fluorosilicate	16871-90-2	2.5 mg/m ³ (as F)	2.5 mg/m ³ (as F)

Respiratory Equipment (Specify Type)

For operations where the exposure limit may be exceeded and dust is generated, a NIOSH approved high efficiency particulate respirator is recommended. Equipment selection depends on contaminates type and concentration. Select in accordance with 29CFR1910.134 and good industrial hygiene practice.

Eye Protection

Normal eye protection should be employed for plant operations. For dusty operations goggles may be required.

Protective Gloves

Other Protective Clothing

Engineering Controls (Ventilation etc.)

Keep area well ventilated.

Work/Hygienic/Maintenance Practices

Wash hands and face thoroughly after exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	<input type="checkbox"/> Gas	<input type="checkbox"/> Liquid	<input checked="" type="checkbox"/> Solid
Appearance and Odor:	Light greenish brown, and odorless		
Melting Point:	650°C	Evaporation Rate:	NA
Boiling Point:	NA	Solubility in Water:	None
Specific Gravity (Water = 1):	2.5	Percent Volatile:	NA
Density:	NA	Saturated Vapor Concentration:	NA
Vapor Pressure (vs. Air or mm Hg):	NA	Viscosity:	NA
Vapor Density (vs. Air = 1):	NA	pH:	NA

10. STABILITY AND REACTIVITY

Stability	Unstable <input type="checkbox"/>	Stable <input checked="" type="checkbox"/>
Conditions To Avoid - Instability	NA	
Incompatibility - Materials To Avoid	NA	
Hazardous Decomposition Or Byproducts	NA	
Possibility of Hazardous Reactions:	Will occur <input type="checkbox"/>	Will not occur <input checked="" type="checkbox"/>
Conditions To Avoid - Hazardous Reactions:	NA	



SAFETY DATA SHEET

M/M 451

Revision N°: 3
 Revision date: 2/10/2015
 Supersedes Revision: 6/28/2014
 Document N°: EHS0200-1-0451

11. TOXICOLOGICAL INFORMATION

Toxicological Information

This product is composed of natural and synthetic clay minerals which are not acutely toxic by ingestion, inhalation or dermal contact.

Hazardous Components (Chemical Name)	CAS NUMBER	NTP	IARC	ACGIH	OSHA
1. Muscovite	1318-94-1				
2. Frits, chemicals	65997-18-4				
3. Potassium fluorosilicate	16871-90-2				

Carcinogenicity:

NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

Results of PBT and vPvB assessment (*Persistent and Bioaccumulative/very Persistent and very Bioaccumulative Chemical*)

NA

Persistence and Degradability

NA

Bioaccumulative Potential

NA

Mobility in Soil

NA

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Disposal of material should be done in compliance with all local, state, provincial and federal laws and regulations. Dispose of contents/containers to unregulated waste.

14. TRANSPORT INFORMATION

Note: Not classified as dangerous in the meaning of transport regulations.

DOT :	: Not regulated.	(US Department of Transportation)
IMDG :	: Not regulated.	(International Maritime Dangerous Goods)
IATA :	: Not regulated.	(International Air Transport Association)
ICAO :	: Not regulated.	(International Civil Aviation Organization)

15. REGULATORY INFORMATION

SARA 302 Components	No subject to the reporting requirements of SARA Title III, Section 302.
SARA 302 Components	No subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	This material does not contain any chemical component with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	No SARA hazards.
US EPA TSCA Inventory	The following component is not listed on the Toxic Substances Control Act Inventory. Muscovite CAS N° 1318-94-1 The following components are listed on the Toxic Substances Control Act Inventory. Frits, chemicals CAS N° 65997-18-4 Potassium fluorosilicate CAS N° 16871-90-2
NJ Right To Know Components	No components are subject to the New Jersey Right To Know Act. Muscovite CAS N° 1318-94-1 Frits, chemicals CAS N° 65997-18-4 Potassium fluorosilicate CAS N° 16871-90-2

16. OTHER INFORMATION

NOTE: When machining use water to collect dust and keep tools cool.

This is the end of SDS for M/M 451