Material Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) MARBLE ENHANCER
MANUFACTURER: 3M
DIVISION: Commercial Care Division

ADDRESS: 3M Center
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

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Product Use:

Specific Use:	Cleans and polishes marble floors, leaving a durable, ultra-high gloss, slip-resistant surface that resists scuffs and marks.
Intended Use:	Industrial use

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
WATER	7732-18-5	60 - 90
MAGNESIUM HEXAFLUOROSILICATE HEXAHYDRATE	18972-56-0	10 - 30
1-METHOXY-2-PROPANOL	107-98-2	7 - 13

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid
Odor, Color, Grade: Colorless, slightly turbid
General Physical Form: Liquid
Immediate health, physical, and environmental hazards: Combustible liquid and vapor. Contact with aluminum or zinc in a pressurized system may generate hydrogen gas which could create an explosion hazard. May cause chemical eye burns. May cause chemical skin burns. May cause chemical gastrointestinal burns. May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:
Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Skin Contact:
Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Inhalation:
Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May be absorbed following inhalation and cause target organ effects.

Ingestion:
Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:
Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

Cardiac Effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	*No Data Available*
Flash Point	Approximately 155 ºF [*Test Method:* Closed Cup]
Flammable Limits - LEL	*No Data Available*
Flammable Limits - UEL	*No Data Available*
OSHA Flammability Classification:	Class IIIA Combustible Liquid

5.2 EXTINGUISHING MEDIA
Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Combustible liquid and vapor. Contact with aluminum or zinc in a pressurized system may generate hydrogen gas which could create an explosion hazard.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Avoid contact with incompatible materials listed in the Reactivity Data Section. For large spills, if necessary, get assistance from professional spill clean up team. For small spills, carefully cover the spill with soda ash (sodium carbonate) or sodium bicarbonate. Work from around the perimeter inward. Avoid splashing. Add enough water to ease mixing and stir. Continue stirring and adding water and neutralizing agent until the reaction stops. Let cool before collecting. Or use a commercially available 'Acid spill' clean-up kit. Follow the kit directions exactly, as specified. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with detergent and water. Clean up residue with a dilute solution (approximately 1 to 5%) of soda ash (sodium carbonate) or baking soda (sodium bicarbonate) in water. Collect the resulting residue containing solution. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Cover, but do not seal for 48 hours. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING
Keep out of the reach of children. Avoid breathing of vapors, mists or spray. Avoid skin contact. Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Keep away from aluminum and zinc. Avoid contact with oxidizing agents.

7.2 STORAGE

Store away from heat. Store out of direct sunlight. Store away from acids. Store away from oxidizing agents. Store away from strong bases.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use in a well-ventilated area.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.
The following eye protection(s) are recommended: Full Face Shield, Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.
Gloves made from the following material(s) are recommended: Butyl Rubber, Neoprene, Nitrile Rubber. The following protective clothing material(s) are recommended: Apron - Neoprene.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.
Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	Limit	Additional Information
1-METHOXY-2-PROPANOL	ACGIH	TWA	100 ppm	
1-METHOXY-2-PROPANOL	ACGIH	STEL	150 ppm	
1-METHOXY-2-PROPANOL	OSHA	TWA	100 ppm	Table Z-1A
1-METHOXY-2-PROPANOL	OSHA	STEL	150 ppm	Table Z-1A
FLUORIDES	ACGIH	TWA, as F	2.5 mg/m3	Table A4
FLUORIDES	OSHA	TWA, as F	2.5 mg/m3	Table Z-1A
MAGNESIUM HEXAFLUOROSILICATE HEXAHYDRATE	ACGIH	TWA, as F	2.5 mg/m3	
MAGNESIUM HEXAFLUOROSILICATE HEXAHYDRATE	OSHA	TWA, as F	2.5 mg/m3	

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Liquid
Odor, Color, Grade:	Colorless, slightly turbid
General Physical Form:	Liquid
Autoignition temperature	*No Data Available*
Flash Point	Approximately 155 ºF [*Test Method:* Closed Cup]
Flammable Limits - LEL	*No Data Available*
Flammable Limits - UEL	*No Data Available*
Boiling point	210 - 250 ºF
Density	*No Data Available*
Vapor Density	Approximately 3.1 [*Ref Std:* AIR=1]
Vapor Pressure	< 27 psia [@ 131 ºF]
Specific Gravity	Approximately 1.1 [*Ref Std:* WATER=1]
pH	1 - 2
Melting point	*No Data Available*
Solubility in Water	Complete
Evaporation rate	Approximately 0.7 [*Ref Std:* BUOAC=1]
Volatile Organic Compounds	7 - 13 % [*Test Method:* calculated per CARB title 2]
Percent volatile	60 - 100 %
VOC Less H2O & Exempt Solvents	400 - 745 g/l [*Test Method:* calculated per CARB title 2]
Viscosity	< 10 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong acids; Strong bases Additional Information: Reaction with mineral acids may cause the release of hydrogen fluoride fumes which are corrosive and toxic. Reaction with alkaline materials may create excessive heat and cause spattering of the mixture.

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance	Condition
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Fluoride	During Combustion
SiF4 when dissolved in HF	During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.
Combustion products will include HF. Facility must be capable of handling halogenated materials.

EPA Hazardous Waste Number (RCRA): D002 (Corrosive)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

ID Number	UPC	ID Number	UPC
70-0705-2803-2	00-48011-19077-3	70-0705-8615-4	00-48011-19926-4

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

311/312 Hazard Categories:
Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

STATE REGULATIONS

CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this material are in compliance with the new chemical notification requirements for the Korean Existing Chemicals Inventory.

The components of this product are listed on the Australian Inventory of Chemical Substances.

The components of this product are listed on Japan's Chemical Substance Control Law List (also known as the Existing and New Chemical Substances List.)

All the components of this product are listed on China's Inventory of Chemical Substances.

The components of this product are in compliance with notification requirements in the Philippines.

The components of this product are listed on the Canadian Domestic Substances List.

INTERNATIONAL REGULATIONS

WHMIS: Hazardous

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 3 **Flammability:** 2 **Reactivity:** 0 **Special Hazards:** None
Acid/Base: Acid **Corrosive:** Yes

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 3 **Flammability:** 2 **Reactivity:** 0 **Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

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No revision information is available.

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