



# Safety Data Sheet (SDS)

Read complete SDS prior to using product.

## **1. PRODUCT IDENTIFICATION**

#### Product Trade Name: Micro Level 5000

#### Name, Address, Phone Number of the Manufacturer

Company:	MICRO MILLING LIMITED
	Claxton Bay P.O. Box 4235,
	Plaisance Park Industrial Estate,
	Pointe-a-Pierre,
	Trinidad & Tobago, W.I.
	Telephone #: 1(868) 659-4060
	Website: www.micromillingtt.com

- Recommended Use: Provides a fast-drying self levelling concrete underlayment for use over various substrates to provide a flat and level floor base that can be covered with conventional floor finishes or can be treated with pigments or coatings to serve as a final wearing surface.
- **Restrictions on Use:** The presence of respirable dust and respirable crystalline silica requires proper care in the use and handling of this product.

#### 2. HAZARD IDENTIFICATION **GHS Hazard Symbols GHS Signal Word** Danger **Physical Hazards** Not Classified **Health Hazards Skin Irritation** Category 2 Eye damage/irritation: Category 1 Sensitisation, Skin Category 1 Carcinogenicity Category 1A Specific Target Organ toxicity, single exposure Category 3 (respiratory tract irritation) Specific Target Organ toxicity, repeat exposure Category 2 (lung)

#### **Hazard Statements**

Causes skin irritation. Causes eye damage. May cause allergic skin reaction. May cause an allergic skin reaction. May cause cancer. May cause damage to organs (lung) through prolonged and repeated exposure.

#### **Precautionary Statement**

PreventionDo not handle until all safety precautions have been read and understood. During mixing or<br/>application avoid contact with eyes and skin. In case of contact with eyes rinse repeatedly with<br/>water and call a physician. Do not breathe dust. Use personal protective equipment (gloves, boots,<br/>goggles, and respirator/mask) when handling or using this product.<br/>Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the<br/>workplace.



Response	If on skin: Wash with water. If skin irritation or rash occurs: Get medical advice/ attention. If in eyes: Wash eyes immediately and repeatedly with water and seek medical attention. If ingested: Rinse mouth & drink water. Don't induce vomiting. Seek immediate medical attention. If inhaled: Remove person immediately to fresh air and ensure comfortable breathing resumes. Give artificial respiration if needed and seek medical attention.
Storage	Store off the ground, on pallets in original unopened packages in a dry, well ventilated area for the best life expectancy. Should not be exposed to water, direct sunlight and /or damp conditions prior to use.
Disposal	Dispose of contents/containers in accordance with local/regional/international regulations.
Hazards not othe	rwise classified (HNOC)

None known.

## Supplemental information

Product becomes alkaline when exposed to moisture.

## 3. COMPOSITION /INFORMATION ON INGREDIENTS List of mixture components

Chemical Name	CAS Number	%
Silica Sand, Crystalline Silica (Quartz)	14808-60-7	40 -60
Portland Cement	65997-15-1	20-40
Cement, alumina	65997-16-2	10-20
Calcium Carbonate	1317-65-3	2-10
Calcium Sulphate	7778-18-9	2-10

Exact percentages have been withheld as a trade secret. Other components below reportable levels.

**Composition:** All concentrations are in percent by weight

## 4. FIRST AID MEASURES

#### Description of First Aid Measures

#### **Eye Contact:**

Flush eyes immediately washing with cool water for a few minutes while holding eyelid open. Remove contact lens if worn and rinse repeatedly with water. If irritation persists, seek medical attention.

#### Skin Contact:

Remove contaminated clothing if any and wash exposed skin with soap and water immediately. If irritation persists, seek medical attention.

#### Ingestion:

If ingested do not induce vomiting. Rinse mouth with water. Drink water. Seek immediate medical attention Inhalation:

If dust concentrations are exceeded remove the person immediately to fresh air. Seek medical attention as needed if distress persists.

#### **Gross Inhalation:**

If there is a gross inhalation of crystalline silica (quartz), remove the person immediately to fresh air. If not breathing, trained personnel should initiate artificial respiration as needed. Obtain immediate medical attention.

# 5. FIRE FIGHTING MEASURES

Flash Point: Will not burn except under extreme temperatures

## **Extinguishing Media:**

Water spray. Water Fog. Carbon dioxide (CO<sup>2</sup>). Dry Chemical Powder. Foam

Other appropriate fire extinguishing media.

# Unsuitable Extinguishing Media: None in particular

#### Specific hazards arising from the product's chemical composition:

Burning produces heavy smoke.



## Hazardous combustion products:

Hazardous combustion products may include Carbon Oxides.

## Special protective equipment and precautions for firefighting personnel:

Wear standard fire-fighting gear with suitable self-contained breathing apparatus

Move undamaged containers or bags from immediate hazard area if it can be safely done

Explosive properties: No unusual explosion hazards noted

Oxidising properties: None noted.

## 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away, cordon off area if possible. Ensure appropriate PPE and clothing is worn by personnel before and during clean up

## Steps to be taken in case material is released or spilled:

Use Appropriate Respiratory Protection if dry. Use NIOSH/OSHA approved respirator if dust exposure level exceeds the exposure limit.

Use Appropriate Boots and gloves if wet. Do not handle damaged containers or spilled materials unless wearing appropriate protective clothing.

## Methods and Materials for containment and clean up

#### Spillage when dry

Limit dust with water spray. Promptly clean by scoop, shovel and/ or vacuum if spilled when dry. Provide ventilation.

#### Spillage when wet

Contain spill by dykeing with inert absorbent materials to control material flow and if possible, return to batch mix if material is uncontaminated.

If contaminated, place in an appropriate container for waste or disposal. Do not dispose of via drainage pipes, canals, drains or waterways.

Following removal of spilled material, wash area with water.

Refer to State and Local Regulations for handling solid waste.

# 7. HANDLING AND STORAGE

## Precautions for safe Handling & Use

Use only in applications as stated on the label.

Use appropriate bending and lifting techniques when handling unopened bags.

Ensure bag/container is properly closed after use

Avoid skin and eye contact. Always wear appropriate personal protective equipment (PPE) - respirator,

gloves, goggles or protective glasses and boots - when moving or using product

Ensure adequate ventilation in work area. Ventilate with fresh air, including opening doors and windows should be observed during any floor/wall tile installation.

Operate HVAC systems at 100% fresh air intake before, during and after installation to eliminate lingering odors or particulate matter.

Do not eat drink or smoke while working. Do not take internally.

## Precautions for safe Storage

Store unopened bags on pallets in original packaging in a dry and cool location

Should not be exposed to water, direct sunlight and damp prior to use

Do not store opened bags

## Incompatible materials:

Contact with powerful oxidising agents such as fluorine, chlorine, tri-fluoride and oxygen di-fluoride may cause fires.



# 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

# **Control Parameters**

# List of components with OEL:

## U.S. OSHA PEL

Components	Туре	Value	Form
Portland Cement	PEL	5mg/m <sup>3</sup>	Respirable fraction
(CAS 65997-15-1)		15 mg/m <sup>3</sup>	Total dust (TWA)
Crystalline Silica (Quartz)	PEL	0.025mg/m <sup>3</sup> ± 5	Respirable fraction
(CAS 14808-60-7)		-	
Cement Alumina	PEL	-not available-	Respirable fraction
(CAS 65997-16-2)			
Calcium Carbonate	PEL	15 mg/ m³	Respirable fraction
(1317-65-3)		5 mg/ m³	Total dust (TWA)
Calcium Sulphate	PEL	15 mg/ m³	Respirable fraction
(7778-18-9)		5 mg/ m³	Total dust (TWA)

OSHA PEL: Exposure to airborne crystalline silica shall not exceed an 8-hour time-weighted average (TWA) limit as stated in 29 CFR 1910.1000 Table Z-3,

## **US ACGIH Threshold Limit Values**

Components	Туре	Value	Form
Portland Cement	TWA	1mg/m <sup>3</sup>	<b>Respirable fraction</b>
(CAS 65997-15-1)			
Crystalline Silica (Quartz)	TWA	0.025mg/m <sup>3</sup>	Respirable fraction
(CAS 14808-60-7)			
Cement Alumina	TWA	-not available-	Respirable fraction
(CAS 65997-16-2)			
Calcium Carbonate	TWA	-not available-	Respirable fraction
(1317-65-3)			
Calcium Sulphate	TWA	-not available	Respirable fraction
(7778-18-9)			

## Appropriate Engineering Controls:

Ensure good general ventilation. Use process enclosures, exhaust ventilation and other controls if needed to control airborne contaminants. Ventilation should be adequate to remove and prevent build-up of any dust generated during handling or use.

## Individual Protection Measures:

Eye protection:	Wear safety glasses or protective goggles that are close fitting to avoid splashed droplets
Protection for hands:	Use protective gloves of leather, neoprene or nitrile rubber gloves for hands
Protection for skin:	Clothing of cotton, denim or rubber that provides comprehensive protection
Respiratory protection:	Use appropriate Occupational Safety & Health approved respirator or dust mask for adequate protection. e.g. NIOSH approved (30 CFR 11) Ensure proper ventilation. Open all available windows and entrances to ensure good ventilation.





General Hygiene:

Periodically wash areas contacted by wet or dry cement products. If clothing becomes soiled with wet or dry cement products, it should be removed and replaced with clean dry clothing. Wash contaminated clothing as soon as possible.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Product Name:	Micro Level 5000		
Physical State:	Solid		
Form:	Powder- Fine Textured Powder.		
Colour:	Grey		
Odour:	General cer	ment like odour.	
Odor threshold:	Not availab	le.	
Vapor Pressure:	Not Availab	ole.	
Vapour density:	Not Availab	ole.	
<b>pH:</b> 11.0-13.	D		
Relative density:	2.2-2.3		
Melting Point/ Freezing Point: Not Available.			
Solubility (in water): Partially soluble			
Initial boiling point and boiling range: Not Available			
Flash Point:	Not Availab	ble	
Evaporation Rate: Not Available			
Flammability (solid/gas): Not Available.			
Partition coefficient (n-octanol/water): Not Available.			
Auto ignition temperature: Not Available.			
Decomposition temperature: Not Available		Not Available.	
Viscosity:	Not Availab	ole.	
<b>Explosive Propertie</b>	es: N	lon-explosive.	
Oxidising propertie	es: N	lon oxidising.	
Solid/gas flammab	ility: N	lot Available.	

# **10. STABILITY AND REACTIVITY**

## **Reactivity:**

Stable under normal conditions

Chemical Stability:

Stable under normal conditions

# Possibility of Hazardous reactions:

None known

Conditions to avoid:

Avoid contact with water or moisture. Once bag/container is opened contents should be used as quickly as possible. Close bags after use to prevent the absorption of moisture and/or contaminants.

#### Incompatibility (materials to avoid):

Avoid contact with strong oxidising agents, powerful acids and strong bases.

Avoid agents such as fluorine, chlorine, tri fluoride and oxygen di-fluoride. Wet cement-based mixtures are alkaline and is not compatible with acids, aluminium or ammonium.

Hazardous decomposition products: None known.

Hazardous Polymerisation: None known.



## **11 – TOXICOLOGICAL INFORMATION Toxicology Data**

Ingredient/ Component Name	Chemical Listed as Carcinogen or potential carcinogen (NTP, IARC, OSHA, ACGIH)
Silica Sand, Crystalline Silica (Quartz)	G-A2, 1-1, N-1
Portland Cement	G-A4
Cement, alumina	Not listed
Calcium Carbonate	Not listed
Calcium Sulphate	Not listed

Ingredient/Component Name	LD50/LC50
Silica Sand, Crystalline Silica (Quartz)	Oral LD50 RAT 500 mg/kg
Portland Cement	Oral LD50 RAT > 5000 mg/kg
Cement, Alumina	Oral LD50 RAT > 5000 mg/kg
Calcium Carbonate	Oral LD50 RAT 6,450 mg/kg
Calcium Sulphate	Oral LD50 RAT > 3000 mg/kg

## Toxicological information via likely routes of exposure

Inhalation:	Dust may irritate the respiratory system, may cause coughing, sneezing and difficulty in breathing.
	May cause burning of mucous membranes
Ingestion:	Swallowing may cause stomach distress, gastrointestinal irritation
Skin Contact:	May causes allergic reaction including rashes and dry skin. May cause minor burns if moisture is present
	present
Eye contact:	Causes serious eye irritation or discomfort including excess blinking, redness and tear production, swelling and blurred vision. Permanent damage to eves can result if exposure is prolonged.

## Info on toxicological effects

Acute Toxicity: May cause respiratory irritation, can cause an allergic skin reaction.

## Symptoms rel. to the physical, chemical and toxicological effects:

Eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Permanent eye damage including blindness can occur. Irritation of respiratory tract, skin and eyes. Coughing, discomfort in the chest and shortness of breath. Allergic skin reactions. Rashes. Burning.

Germ cell mutagenicity: No data available to indicate the product or any component present at greater than 0.1% are mutagenic or geno toxic.

Carcinogenicity: This product has the potential to generate respirable dust during handling and use. Dust may contain respirable crystalline silica. Crystalline silica has been classified by the IARC, NTP and ACGIH as a known human carcinogen and suspected human carcinogen respectively. May cause delayed lung injury.

Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

IARC Monographs. Overall evaluation	on of Carcinogenicity:		
	Crystalline Silica (CAS 14808-60-7)	1- Carcinogenic to humans	
NTP Report on Carcinogens			
	Crystalline Silica (CAS 14808-60-7)	Known to be a Human Carcinogen	
Osha Specifically Regulated Substances (29 CFR 1810.1001-1050): Not Regulated			
Reproductive toxicity: This product is not expected to cause reproductive or developmental defects			
Specific Target Organ toxicity (single exposure): May cause respiratory irritation			
Specific Target Organ toxicity (repea	ated exposure):		
Lung -Prolonged	exposure can lead to silicosis, a chronic i	nflammation and fibrosis of the lung	

e lung tissue.

## Aspiration hazard: Not a known aspiration hazard

Chronic Effects: The adverse health effects associated with exposure to crystalline silica (quartz) includes silicosis. Other chronic adverse health effects include scleroderma, tuberculosis, nephrotoxicity and pneumocononiosis, a



respiratory disease caused by the long-term inhalation of mineral dust.

# **12– ECOLOGICAL INFORMATION**

Toxicity: Use good working practices and keep good workplace sanitation to minimize /or eliminate the contamination of the environment by the product.
 There is no chronic or acute ecological impact when product is used according to directions.
 The normal dilution of this product during cleanup with water after use, and which may make its way to drains, sewers or watercourses is generally not considered harmful. Nevertheless, the manufacturer advises this practice should be limited or avoided if possible.
 Eco Toxicological information: No data available

 Persistence and Degradability:
 No data available.

 Bioaccumulation Potential:
 No data available.

 Soil to Groundwater Contamination:
 The product is not mobile in soil.

 Other Adverse Effects:
 No other adverse effects including ozone depletion, photochemical ozone depletion, endocrine disruption or global warming potential is expected.

#### **13 – DISPOSAL CONSIDERATIONS**

#### Waste treatment methods

Waste must be handled in accordance with any and all applicable state, provincial, federal, county and/or local municipality regulations.

Consult local authorities before disposal of product. Certified disposal agents and methods will need to be approved by relevant authorities. (e.g. Trinidad & Tobago- CEC clearances issued from the EMA to disposal agents is required)

Do not dispose of unused or contaminated product in drains, watercourses and sewer systems.

#### **14 – TRANSPORT INFORMATION**

DOT:	Not classified as dangerous goods
IATA:	Not classified as dangerous goods
IMDG:	Not classified as dangerous goods

Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and The IBC Code

# **15 – REGULATORY INFORMATION**

<b>Country Regulations</b>	
USA:	
US Federal Regulations: This	s product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication
Sta	andard, 29 CFR 1910.1200
TSC	CA Section 12b Export Notification (40 CFR 707, Substances Control Act – Not regulated.
OS	HA Specifically Regulated Substances (29 CFR 1910.1001-1050) – Not regulated.
CE	RCLA- Not listed as a hazardous substance (40 CFR 302.4) – Not listed.
Superfund Amendments & F	Reauthorisation Act of 1986 (SARA):
Hazard Categories	: Immediate Hazard- Yes
-	Delayed Hazard- Yes
	Fire Hazard- No
	Pressure Hazard- No
	Reactivity Hazard- No
SARA 302 Extreme	ely Hazardous Substance – Not listed.
SARA 311/312 Hazardous Chemical – Yes.	
SARA 313 (TRI reporting) – Not regulated.	
Other Federal regulations:	
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List – Not regulated.	
Clean Air Act (CAA) Section 112 (r) Accidental Release Prevention (40 CFR 68.130) – Not regulated.	



Safe Drinking Water Act (SDWA) – Not regulated

# USA & Puerto Rico:

Toxic Substances Control Act (TSCA) Inventory – Not listed.

# Europe:

European List of Notified Chemical Substances- Not listed.

European Inventory of Existing Commercial Chemical Substances- Listed.

# Trinidad & Tobago:

National EMA – Certified as substance requiring Environmental Certification Regulation – Not listed. Ministry of Health- Pesticides & Toxicological Inspectorate – Not listed.

16 - OTHER INFO	ORMATION	
HMIS Ratings	Health: 2 (moderate hazard) Flammability: 0 Physical Hazard: 0	
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Disclaimer:	This Safety Data Sheet (SDS) has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information and guidelines for the safe and proper use of our product. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Micro Milling Limited assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of the product. Further the manufacturer warrants that this product shall be of saleable quality when used in accordance with stated instructions. This product is not warranted as suited for any purpose other than the general use(s) for which it is intended.	