SAFETY DATA SHEET - 16 Sections

The Schundler Company

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier **Ultra Mix II and Ultra Mix**		WHMIS CLASSIFICATION: Not Applicable	
Product Use A vermiculite/Portland cement pre-mix for use under below-grade vinyl liner pools.			
Manufacturer's Name **The Schundler Company**		Supplier's Name	
Street Address **150 Whitman Avenue**		Street Address	
City, State **Edison, NJ**		City	Province
Postal Code **08817**	Emergency Telephone **732-287-2244**	Postal Code	Emergency Telephone
Date SDS Prepared **June 27, 2016**	SDS Prepared By **Schundler Consulting**	Phone Number **732-287-2244**	

SECTION 2 - HAZARDS IDENTIFICATION

Route of Entry ■ Skin Contact ☐ Skin Absorption ■ Eye Contact ■ Inhalation ☐ Ingestion

Emergency Overview:

Product is tan flakes (or granules) of vermiculite mixed with Portland cement. Dusts may cause irritation of eyes, skin, mucous membranes and respiratory tract. Wear appropriate personal protective equipment. Keep individuals not involved in the cleanup out of the area. Pick up released product with appropriate implements and return to original container if reusable. If not reusable, place in appropriate containers for disposal. Although the product itself is non-hazardous, material collected during clean up operations may be contaminated and should be treated as hazardous unless specific testing, including TCLP, shows the collected material to be non-hazardous. Product is quite inert and is not expected to present an environmental hazard.

WHMIS Symbols

May cause skin corrosion/irritation—Skin corrosion (Category 1,1A,1B and 1C)
Serious eye damage/eye irritation---Serious eye damage (Category 1)

Respiratory or skin sensitization - Respiratory sensitizer (Category 1, 1A and 1B)
Aspiration hazard (Category 1)

May cause less serious health effects

GHS Classification:

Skin Corrosion/Irritation, Category 1A
Serious Eye Damage/Eye Irritation, Category 1
Skin Sensitization, Category 1
Carcinogenicity, Category 1A
Specific Target Organ Toxicity Single Exposure, Category 3
Specific Target Organ Toxicity Repeat Exposure, Category 2

Hazard Statement

Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause cancer.
May cause respiratory irritation.
May cause damage to lungs through prolonged or repeated inhalation

SECTION 2 - HAZARDS IDENTIFICATION (Continued)

Precautionary Statements:

Prevention:

Keep product sealed in original packaging. Store in a dry, well ventilated place. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, clothing, and eye and face protection. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all instructions have been read and understood. Do not breathe dust, fumes, gases, mists, vapors, or sprays. Use only outdoors or in a well ventilated area. In case of inadequate ventilation wear respiratory protection. Dispose of contents/container in accordance with local/regional/international regulations.

Response:

In case of inhalation, remove to well-ventilated place. If breathing difficulty occurs, administer oxygen. Seek medical help if coughing and other medical symptoms do not subside. In case of eye contact, immediately flush eyes with copious amounts of water. Continue flushing for 15 minutes including under the lids to remove all particles. Call a physician immediately if irritation persists. In case of skin contact, wash skin with pH-neutral soap and water. Apply moisture renewing lotions to heal dry, irritated skin. Seek medical attention in all cases of severe irritation or burns.In case of ingestion, do NOT induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients *(specific)*	%	CAS Number	LD 50 of Ingredient *(specify species and route)*	LC 50 of Ingredient *(specify species)*	OSHA PEL (mg/m3)	ACGIHTLV (mg/m3)
Portland Cement	<70%	65997-15-1			15	5
Vermiculite (Magnesium, Aluminum Iron Silicate)	<50%	1318-00-9	Not Available	Not Available	10	5
Proprietary Admixtures	<2%	varies				
Silica	<1	14808-60-7	Not Available	Not Available	Not Available	.05

SECTION 4 - FIRST AID MEASURES

Skin Contact

Wash thoroughly with mild soap and water. Seek medical attention if irritation develops. Remove any contaminated clothing and launder thoroughly before reuse. Apply moisture renewing lotions if necessary.

Eye Contact

Flush eyes with generous quantities of water or eye rinse solution for 15 minutes including under the lids to remove all particles. Consult physician if irritation persists.

Inhalation

Remove to fresh air. Blow nose to evacuate dust. . If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention

Ingestion

Do not induce vomiting. Drink generous amounts of water and call physician immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Flammable ☐ Yes ■ No

Means of Extinction

N/A

Flashpoint (°C) and Method	Upper Flammable Limit (% by volume)	Lower Flammable Limit (% by volume)
None	None	None
Auto Ignition Temperature (°C)	**Explosion Data—Sensitivity to Impact**	**Explosion Data—Sensitivity to Static Discharge**
None	None	N/A

Hazardous Combustion Products

N/A

NFPA

Health: 1 Flammability: 0 Reactivity: 0 Other: None

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions:

If dust is present, use respirator fitted with particulate filter as specified in Section 8. Protect eyes with goggles.

Containment and Cleanup:

Vacuum clean dust with equipment fitted with HEPA filter. Use dust suppressant such as water if sweeping is necessary. Although the product itself is non-hazardous, material collected during clean-up operations may be contaminated and should be treated as hazardous unless specific testing, including TCLP, shows the collected material to be non-hazardous

Environment:

Not considered as hazardous waste by RCRA (40 CFR Part 261). Place waste and spillage in closed containers. Dispose of in approved landfill. Do not discharge into lakes, ponds, streams, or waterways.

SECTION 7 - HANDLING AND STORAGE

Handing Procedures and Equipment

Minimize dust generation. Avoid contact with eyes. Avoid breathing dust. Repair or dispose of broken bags. Wet mopping or vacuuming with a unit that contains a HEPA filter is recommended to clean up any dusts that may be generated during handling and processing.

Hazardous Combustion Products

Store in a dry place to maintain packaging integrity and product quality. Observe all label precautions and warnings.

SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits ■ ACGIH TLV ■ OSHA PEL ☐ Other

	OSHA PEL		ACGIH TLV
Chemical Name:	**Total Dust:**	**Respirable Fraction:**	**TWA:**
Portland Cement	15 mg/m^3	5 mg/m^3	10 mg/m^3
Exfoliated Vermiculite	15 mg/m^3	5 mg/m^3	10 mg/m^3
Admixes	15 mg/m^3	5 mg/m^3	10 mg/m^3

Specific Engineering Controls (such as ventilation, enclosed process)

Adequate ventilation and appropriate local exhaust where needed to keep dust level below PEL. Local exhaust ventilation should be provided to maintain exposures below the limits recommended for nuisance particulates of 10 mg/M^3 for total particulates and 3 mg/M^3 for respirable particulates. Design details for local exhaust ventilation systems may be found in the latest edition of “Industrial Ventilation: A manual of Recommended Practices” published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153 Lansing, MI 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.

Personal Protective Equipment ■ Gloves ■ Respirator ■ Eye ☐ Footwear ■ Clothing ☐ Other

If Checked, Please Specify Type:

Skin: No special equipment is required.

Respiratory: Respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present. If the dust concentration is less than ten (10) time the Permissible Exposure Limit (PEL) use a quarter or half mask respirator. If dust concentration is greater than ten (10) times and less than fifty (50) times the PEL, a full-face piece respirator fitted with replaceable N95 filters is recommended. If dust concentration is greater than fifty (50) and less than two-hundred (200) times the PEL use a power air-purify (positive pressure) respirator with replaceable N95 filter. If dust concentration is greater than two-hundred (200) times the PEL use a type C, supplied air respirator (continuous flow, positive pressure), with full face piece, hood or helmet. Always consult your respiratory protective equipment supplier or a professional industrial hygienist for selection of the proper equipment. The evaluation of the need for respiratory protection should be made by a professional industrial hygienist. Always consult your respiratory protective equipment supplier or a professional industrial hygienist for selection of the proper equipment. The evaluation of the need for respiratory protection should be made by a professional industrial hygienist.

Eye: Goggles to protect from dust.

Clothing: All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned and reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Odor and Appearance		Odor Threshold (ppm)
Solid	Odorless Tan Flakes, Granules and/or Gray Powder		N/A
Specific Gravity	Vapor Density (air=1)		Vapor Pressure (mmHg)
2.3-2.6	N/A		N/A
Evaporation Rate	Boiling Point (°C)	Melting Point	Freezing Point (°C)
N/A	N/A	1260-1370 °C	N/A
pH	Coefficient of Water/Oil Distribution		Solubility in Water
9-13 (10% slurry in water)	N/A		Insoluble (<1%)

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability ■ Yes ☐ No	If not, under what conditions Stable under normal conditions
Incompatibility with other Substances ■ Yes ☐ No	If yes, which ones? Do not store with strong acids or reducing agents. Aluminum powder and other alkali and alkaline earth elements react with Portland cement to liberate hydrogen gas. Acids react with product and generate a large amount of heat. Hydrofluoric acid will dissolve the silica found in Portland cement and masonry sand.

Reactivity and under what conditions?

No dangerous reactions known. Reacts readily with water and produces an exothermic reaction (heat) and caustic calcium hydroxide.

Hazardous Decomposition Products

None. Product is stable to at least 2400° F.

SECTION 11 - TOXICOLOGICAL INFORMATION

Effects of Acute Exposure

Potential irritant for skin contact, eye contact or inhalation. Skin contact may aggravate existing dermatitis. Inhalation from prolonged and continuous exposure may aggravate existing asthmatic or respiratory conditions. Contact with moist tissue areas such as the eyes and nose can cause mild irritation to severe burns or even blindness. These areas should be flushed with water immediately. Skin contact can cause dry ness or cracking and trigger dermatitis in sensitive ve individuals. Ingestion of small amounts may cause nausea and is not known to be harmful; however, ingestion of large amounts can lead to severe burns of the mouth, throat, stomach, and digestive tract.

Effects of Chronic Exposure

Prolonged inhalation of excessive levels vermiculite dust may cause a simple pneumoconiotic condition, not normally associated with a decrement in lung function. In cases of long-term exposure to extremely high levels of dust, complicated pneumoconiosis with lung function may occur. Dermatitis may occur in individuals with repeated exposure due to the presence of small amounts of hexavalent chromium. Crystalline silica is listed by the IARC as a known carcinogen and causes the chronic lung disease known as silicosis. Silicosis is known to increase the risk of contracting tuberculosis. Crystalline silica has also been shown to lead to autoimmune disorders and renal disorders.

Irritancy of Product

Potential irritant for skin contact, eye contact or inhalation.

Skin Sensitization	Respiratory Sensitization
N/A	N/A
Carcinogenicity—IARC	Carcinogenicity—ACGIH
N/A	N/A
Reproductive Toxicity	Teratogenicity
N/A	N/A
Embrotoxicity	Mutagenicity
N/A	N/A

Name of Synergistic Products/Effects

N/A

SECTION 12 - ECOLOGICAL INFORMATION

Overview:

The product is not expected to present an ecological hazard. It is expected to have low to zero mobility in soil. Product is not expected to biodegrade quickly.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal

Not considered hazardous waste by the RCRA (40 CFR Part 261). Place waste and spillage in closed containers. Dispose in accordance with Federal, State and Local regulations.

SECTION 14 - TRANSPORT INFORMATION

Special Shipping Information No known shipping regulations.	PIN N/A
IDG N/A	DOT N/A
IMO N/A	ICAO N/A

SECTION 15 - REGULATORY INFORMATION

OSHA HCS: The components of this product are considered hazardous chemicals under this regulation and should be included in an employer's Hazard Communication Program.

TSCA Status: All non-proprietary components in this product are on the TSCA Inventory.

FHSA: A component of this product, portland cement, is considered as a hazardous substance. As such, this product is subject to statutes promulgated under the act.

Reporting Requirements:			**EPCRA (SARA Title III)**		**CERCLA**	**CAA**	
Chemical Name:	§302:	§304:	§311:	§312:	§313:	40 CFR 302:	112(r)
Portland cement	No	No	Yes, 10,000 lb	Yes, 10,000 lb	No	No	No
Exfoliated vermiculite	No	No	Yes, 10,000 lb	Yes, 10,000 lb	No	No	No
Proprietary admixture blend	No	No	Yes, 10,000 lb	Yes, 10,000 lb	No	No	No
Crystalline Silica	No	No	Yes, 10,000 lb	Yes, 10,000 lb	No	No	No

California Prop. 65: A component of this product, crystalline silica, is a substance known to the State of California as a carcinogen. This product may also contain trace amounts of heavy metals or organic compounds known to the State of California to cause cancer, birth defects, or other reproductive toxins.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS / SDS contains all of the information required by CPR.

SECTION 16 - OTHER INFORMATION

Notice: This information relates only to the material designated and may not be valid for such material used in combination with any other materials or in any process. All statements, information and data provided are believed to be accurate and reliable, but are presented without any guarantee, representation, warranty or responsibility of any kind, expressed or implied. Any and all representations and/or warranties of merchantability of fitness for a particular purpose are specifically disclaimed. Users should make their own investigations as to the suitability of the information or product for their particular purpose. Nothing in this document is intended as permission, inducement or recommendation to violate any laws or practice any invention covered by existing patents, copyrights or inventions. The Schundler Company does not accept liability for any loss or damage that may occur from the use of this information.