

MATERIAL SAFETY DATA SHEET (MSDS)
VERSASHIELD AND VERSASHIELD MBX
ROLLED MOISTURE SUPPRESSION SYSTEM**MSDS No.:** VS-1(a) **Revision:** 1 **Revision Date:** 29-10-13**SECTION 1: IDENTIFICATION DATA**

This product is a mineral coated chopped strand glass mat (non restricted) rolled moisture barrier designed for application with the Versashield Seam Tapes and designed for use as a vapor barrier over suspended, above and on-grade concrete slab.

This Material Safety Data Sheet (MSDS) supersedes all earlier dated revisions of Versashield MSDS's referring to the product or products listed above.

SECTION 2: HAZARDOUS CONSTITUENTS

Material or Component:	CAS NO:	%	HAZARD DATA:
LIMESTONE	1317-65-3	70	ACGIH(TLV-TWA)=10 mg/m3 *** OSHA(PEL-TWA)=15 mg/m3 Total Dust =5mg Respirable Fraction
GLASS, FIBROUS (diam. >13 micron)	65997-17-3	5	ACGIH(TLV-TWA)=10 mg/m3 OSHA(PEL-TWA)=15 mg/m3 Total Dust =5mg Respirable Fraction
Ceramic Microspheres	66402-68-4	5	ACGIH(TLV-TWA)=10 mg/m3 =3 mg/m3 Respirable Fraction OSHA(PEL-TWA)=15 mg/m3 Total Dust =5mg Respirable Fraction
Quartz Silica	14808-60-7	0.01-0.34	ACGIH(TLV-TWA)=0.1 mg/m3 Respirable Dust OSHA(PEL-TWA)=0.1 mg/m3 Respirable Dust
Calcium Hydroxide	1305-62-0	0.1-0.2	ACGIH(TLV-TWA)=5 mg/m3 OSHA(PEL-TWA)=15 mg/m3 Total Dust =5mg Respirable Fraction

***This value is for total dust containing no asbestos.

SECTION 3: HAZARDS IDENTIFICATION**PRIMARY ROUTE OF EXPOSURE:** Skin Contact**SIGNS & SYMPTOMS OF EXPOSURE**

EYES: Potential for eye irritation.
SKIN: Potential for skin irritation.
INGESTION: Not expected to be ingested.
INHALATION: Potential for respiratory tract irritation.

ACUTE HEALTH

HAZARDS: Excessive grinding or abrasion of this product may create airborne dust and fiber concentrations in excess of state and federal OSHA permissible exposure limits. Exposure to concentrations in excess of these PELs may cause severe respiratory irritation, skin irritation and/or eye irritation.

CHRONIC HEALTH

HAZARDS: Repeated and/or prolonged exposure to dust and fibers at concentrations in excess of state and federal OSHA permissible exposure limits may result in respiratory damage, chronic skin irritation and/or eye injury.

CARCINOGENICITY:

Direct implantation of glass fibers into the lung tissue of laboratory animals has produced fibrosis and lung cancer. Human epidemiological studies of inhalation exposure have yielded negative results. NTP Listed; carcinogen ISRC Class 3. Note: Fiberglass is completely encapsulated in the product. If handled under normal conditions, fiberglass should not be released.

The International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) have determined that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite. In addition, IARC has determined that there is sufficient evidence for the carcinogenicity of quartz and cristobalite in experimental animals. Among individuals with silicosis, lung cancer occurs more frequently in those who smoke.

MATERIAL SAFETY DATA SHEET (MSDS)
VERSASHIELD AND VERSASHIELD MBX
ROLLED MOISTURE SUPPRESSION SYSTEM**SECTION 4: FIRST AID MEASURES****FIRST AID PROCEDURES:**

- EYES:** Flush with clean water for at least 15 minutes. Seek medical attention if irritation persists.
- SKIN:** Flush with clean water for at least 15 minutes. Seek medical attention if irritation persists.
- INHALATION:** Remove affected persons from source of exposure. Seek medical attention if irritation persists or if affected person(s) develop breathing difficulties.
- INGESTION:** This product is not intended for consumption or direct contact with any type of food or beverage. Seek medical attention if this product is ingested.

NOTES TO
PHYSICIANS OR
FIRST AID
PROVIDERS: N/A

SECTION 5: FIRE FIGHTING MEASURES

- SUITABLE EXTINGUISHING MEDIA:** Water, Foam, Dry Chemical, Sand and CO2
- HAZARDOUS COMBUSTION PRODUCTS:** Carbon Dioxide and Carbon Monoxide
- RECOMMENDED FIRE FIGHTING PROCEDURES:** Treat with generally accepted practices form combustible product.
- UNUSUAL FIRE & EXPLOSION HAZARDS:** N/A

SECTION 6: ACCIDENTAL RELEASE MEASURES

Collect spilled material in appropriate containers for reuse or disposal. Avoid dry sweeping, scraping or sanding and other spill removal procedures that may create airborne dust and fibers.

SECTION 7: HANDLING AND STORAGE

- HANDLING AND STORAGE:** No specific handling or storage requirements.

SECTION 8: CONTROL MEASURES**ENGINEERING CONTROLS / VENTILATION:**

reduce

Use of this product is not anticipated to require more than general room ventilation during Normal conditions of use that are in accordance with the manufacturer's specified Applications. However, use of this product in other applications not specified by the manufacturer could potential generate airborne dust and fibers that may require additional mechanical exhaust to prevent employee overexposures. Excessive grinding or abrasion of this product may create airborne dust and fiber concentrations in excess of state and federal OSHA permissible exposure limits. If employee exposures exceed these PELs, local exhaust ventilation or other mechanical ventilation systems may be required to such exposure to concentrations below PELs. If mechanical exhaust ventilation is necessary, exhaust air should be appropriately filtered or otherwise controlled to meet local, state and federal air pollution and air quality laws and standards.

MATERIAL SAFETY DATA SHEET (MSDS)
VERSASHIELD AND VERSASHIELD MBX
ROLLED MOISTURE SUPPRESSION SYSTEM

RESPIRATORY PROTECTION:	If employee exposures exceed state or federal OSHA permissible exposure limits, respiratory protection should be worn until and unless such exposures are reduced to concentrations below these PELs. Only NIOSH approved respirators should be worn. selection and use of specific respirators should meet applicable standards set by state and federal OSHA standards for respiratory protection and for the specific substances and concentrations to which employees are exposed.
EYE PROTECTION:	Wear safety glasses with side shields or safety goggles. Selection and use of all eye protection should meet applicable standards set by the American National Standards Institute (ANSI) and state and federal OSHA standards.
SKIN PROTECTION:	Wear sturdy work gloves and intact clothing with long sleeves and long pants.
OTHER PPE:	Wear respiratory protection if used, such use must comply with state and federal OSHA Standards. Only respirators approved by the National Institute for Occupational and Health (NIOSH) should be used.
WORK HYGIENIC PRACTICES:	Employees should avoid eating, drinking, chewing, smoking, taking medication and applying Cosmetics in work areas where this product is being installed or removed. Employees Wash their hands and other exposed areas of skin after handling this product and before Smoking or consuming anything. Employees should shower at the end of each work shift After installing or removing this product. Work clothing should be washed separately and The washing machine should be wiped out at the end of the washing cycle.
EXPOSURE GUIDELINES:	N/A

SECTION 9: PHYSICAL / CHEMICAL CHARACTERISTICS

Appearance and Odor: Gray (Versashield) Blue (Versashield MBX) top coat with clear poly backing. Rolled material – 5'0 width. Odorless.

Physical Data: Flash Point: No Data, Evaporation Rate: N/A, pH: No Data, Boiling Point: No Data, Melting Point: No Data, Percent Volatile: No Data, Solubility: N/A

SECTION 10: REACTIVITY DATA

Hazardous decomposition will occur only under fire conditions. Various harmful compounds could be formed during combustion. No hazards are associated with normal and/or intended uses.

THERMAL STABILITY *STABLE*

CONDITIONS TO AVOID (STABILITY): None

INCOMPATIBILITY: Strong acids will react with the limestone component releasing CO₂ gas.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon Monoxide, Carbon Dioxide and Hydrocarbons will result from incomplete combustion of the organic binder if involved in a fire.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXOLOGICAL INFORMATION: No information available.

**MATERIAL SAFETY DATA SHEET (MSDS)
VERSASHIELD AND VERSASHIELD MBX
ROLLED MOISTURE SUPPRESSION SYSTEM**

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No information available.

The anticipated instances of release into the environment would be during disposal of scrapped building materials, of which this product could be a part, or waste during use. Other than the paper component, the materials of constructions are very resistant to biodegradation and are not water soluble. Individual component MSDS information is available by contacting Halex Technical Services Department at 909-622-3537.

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of Halex Corporation's knowledge, solid waste material is considered non-hazardous under U.S. RCRA (40 CFR 261). Collect and dispose of all waste materials following compliance with local, state and federal applicable laws and regulations.

SECTION 14: TRANSPORT INFORMATION

For domestic (U.S.) purposes, this product is not designated as a hazardous material by the U.S. Department of Transportation.

SECTION 15: ADDITIONAL REGULATORY INFORMATION

TSCA: This product and its components are listed on the TSCA 8(b) inventory.

CERCLA: None

SARA

311/312 HAZARD CATEGORIES: None

313 REPORTABLE INGREDIENTS: None

CALIFORNIA PROPOSITION 65: This product contains a chemical known to the State of California to cause cancer and birth Defects, or other reproductive harm.

Other state regulations may apply. Check individual state requirements. The following components appear on one or more of the following state hazardous substances list(s):

Material or Component:	CAS NO:	CA	MA	MN	NJ	PA	RI
LIMESTONE	1317-65-3	NO	YES	YES	NO	YES	YES
GLASS, FIBROUS (diam. >13 micron)	65997-17-3	YES	NO	YES	YES	YES	YES
Ceramic Microspheres	66402-68-4	NO	NO	N	NO	N	YES
Quartz Silica	14808-60-7	YES	YES	YES	YES	YES	YES
Calcium Hydroxide	1305-62-0	YES	YES	YES	YES	YES	YES

MATERIAL SAFETY DATA SHEET (MSDS)
VERSASHIELD AND VERSASHIELD MBX
ROLLED MOISTURE SUPPRESSION SYSTEM**IMPORTANT NOTICES**

Information on this form is furnished solely for the purpose of compliance with OSHA's Hazard Communication Standard (29 CFR 1910-1200). Persons using this product shall make their own determination as to the applicability of the Hazard Communication Standard and any other requirement to their use of this product. Halex Corporation believes that the statements, technical information, and recommendations set forth herein are reliable. However, they are supplied without warranty of any kind, expressed or implied.

REVISION HISTORY

Revision	Effective Date:	Prepared By:	Reason for Revision
1	29-10-13	Tony Dominguez	Revise format. Add company division logo. Add Revision History Table. Remove Print Date. Format Compliance Revision.

Prepared By: **Tony A. Dominguez**
Technical Services Manager
Halex Corporation

Approved By: **Dr. Ly Nguyen**
Technical Services Director
Halex Corporation

Issued Final Draft: **10-29-2013**