



## I. PRODUCT INFORMATION

<b>MANUFACTURER'S NAME:</b> Elk Corporation of Texas	<b>REGULAR TELEPHONE NO.</b> (972) 875-9611 <b>EMERGENCY TELEPHONE NO.</b> (972) 875-9611
<b>ADDRESS:</b> 202 Cedar Road, Ennis, Texas 75119	
<b>TRADE NAME:</b> <i>VERSA SHIELD™</i> Underlayment, <i>VERSA SHIELD™</i> FB-1S, <i>VERSA SHIELD™</i> FB-2S	
<b>SYNONYMS:</b> Roofing Underlayment and Slipsheet	
<b>SHIPPING NAME:</b> DOT: Mineral-Coated Chopped Strand Glass Mat (not restricted)	

## II. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	CAS NO.	%	HAZARD DATA
Limestone	1317-65-3	70-80	ACGIH(TLV-TWA)=10 mg/m3 * OSHA(PEL-TWA)=15 mg/m3 Total Dust = 5 mg/m3 Respirable Fraction
Glass, Fibrous (diameter > 13 micron)	65997-17-3	5-15	ACGIH(TLV-TWA)=10 mg/m3 OSHA(PEL-TWA)=15 mg/m3 Total Dust = 5 mg/m3 Respirable Fraction
Ceramic Microspheres	66402-68-4	5-10	ACGIH(TLV-TWA)=10mg/m3 Inhalable Particulate = 3 mg/m3 Respirable Fraction OSHA(PEL-TWA)=15 mg/m3 Total Dust = 5 mg/m3 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

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

Fibrous Glass Inhalation

Acute: Mechanical irritation of the mouth, nose and throat.

Chronic: Many studies have been conducted to determine the potential long term effects of fibrous glass inhalation. Although inconclusive, some research supported by the industry indicates that manufacturing plant employees, who were first employed more than 30 years ago in factories that manufactured glass wool and mineral wool, have an increased rate of lung cancer as compared to certain other reference populations. Further third party study is planned to identify those factors associated with the reported increased rate. Similar findings were not reported regarding employees in textile fiber manufacturing plants. Animal studies have not demonstrated an increased rate of lung cancer when the animals breathed large quantities of glass fibers. Artificial implantation or injection of fine glass fibers into the chest, abdominal cavity or trachea of laboratory animals has produced cancer.

## III. PHYSICAL DATA

<b>BOILING POINT, 760 MM HG</b>	NA	<b>MELTING POINT</b>	NA
<b>SPECIFIC GRAVITY (H<sub>2</sub>O=1)</b>	NA	<b>VAPOR PRESSURE</b>	NA
<b>VAPOR DENSITY (AIR=1)</b>	NA	<b>SOLUBILITY IN H<sub>2</sub>O % BY WT</b>	Insoluble
<b>% VOLATILES BY VOL.</b>	NA	<b>EVAPORATION RATE (BUTYL ACETATE-1)</b>	NA
<b>APPEARANCE AND ODOR</b>	Tan Color, Mineral-filled Mat - Odorless	<b>pH (AS IS)</b> <b>pH (1% SOLN.)</b>	NA



**IV. FIRE AND EXPLOSION DATA**

<u>FLASH POINT (TEST METHOD)</u>	NA	<u>AUTOIGNITION TEMPERATURE</u>	Non-Flammable		
<u>FLAMMABLE LIMITS IN AIR, % BY VOL.</u>	NA	<u>LOWER</u>	NA	<u>UPPER</u>	NA
<u>EXTINGUISHING MEDIA</u>	WATER, FOAM, DRY CHEMICAL, SAND AND CO <sub>2</sub>				
<u>SPECIAL FIRE FIGHTING PROCEDURES</u>	NONE-Treat with generally accepted practices for combustible product.				
<u>UNUSUAL FIRE AND EXPLOSION HAZARD</u>	NA				

**V. HEALTH HAZARD INFORMATION**

<u>HEALTH HAZARD DATA</u>	<u>HAZARD CLASSIFICATION</u>	<u>BASIS FOR CLASSIFICATION</u>	<u>SOURCE</u>
<u>ROUTES OF EXPOSURE</u> <u>INHALATION</u>	NUISANCE DUST	"Industrial Exposures and Control Technologies for OSHA Regulated Hazardous Substances"	1-19-89 Federal Register
<u>SKIN CONTACT</u>	NUISANCE DUST	" "	" "
<u>SKIN ABSORPTION</u>	NA		
<u>EYE CONTACT</u>	NUISANCE DUST	"Industrial Exposures and Control Technologies for OSHA Regulated Hazardous Substances"	1-19-89 Federal Register
<u>INGESTION</u>	NA		" "

**EFFECTS OF OVEREXPOSURE:** Use of this product is not anticipated to result in employee overexposure 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 potentially result in eye, skin and/or respiratory irritation.

**ACUTE OVEREXPOSURE:** 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 OVEREXPOSURE:** 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.



## EMERGENCY AND 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 persons 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 PHYSICIAN:

## VI. REACTIVITY DATA

**CONDITIONS CONTRIBUTING TO INSTABILITY:** NA

**INCOMPATIBILITY:** Strong acids will react with the limestone component releasing CO<sub>2</sub> gas.

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

**CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:** Will not occur

## VII. DISPOSAL, SPILL OR LEAK PROCEDURES

**AQUATIC TOXICITY:** NA

**WASTE DISPOSAL METHOD:** Dispose of waste in accordance with local, state, and Federal laws and regulations pertaining to material of this type of composition.

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Collect spilled material in appropriate containers for reuse or disposal. Avoid dry sweeping and other spill removal procedures that may create airborne dust and fibers.

**NEUTRALIZING CHEMICALS** NA

**VIII. SPECIAL PROTECTION INFORMATION**

**VENTILATION REQUIREMENTS:** 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 potentially 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 reduce such exposures to concentrations below the 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.

**SPECIFIC PERSONAL PROTECTIVE EQUIPMENT:** Where respiratory protection is 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.

**EYES:** Wear safety glasses with sideshields 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:** Wear sturdy work gloves and intact clothing with long sleeves and long pants.

**FEET:** Wear socks and appropriate, closed-toe shoes or boots. Selection and use of all foot protection should meet applicable standards set by the American National Standards Institute (ANSI) and state and Federal OSHA standards.

**HEAD:** Wear a hard hat, bump cap or other head covering appropriate for the specific work areas and activities to be performed. Selection and use of all head protection should meet applicable standards set by the American National Standards Institute (ANSI) and state and Federal OSHA standards.

**RESPIRATORY:** 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.

**WORK 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 should 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.

**IX. SPECIAL PRECAUTIONS**

**STATE:** This product contains chemicals known to the State of California to cause cancer and/or reproductive toxicity, as defined by Title 22 California Code of Regulations Section 12000. For additional information on this content, contact the product manufacturer.

