



SDS No. AXSN-1

Revised/Reviewed: 08/15/2018

Revised From: 06/30/2016

SECTION 1 • PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME OR NUMBER: **ARMATEX® SN** silicone coated Nomex textiles, cloth, felt, tape, sleeving, rope, cordage, and thread.

COMPANY:	Mid-Mountain Materials, Inc.	TELEPHONE:	206-762-7600
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SECTION 2 • HAZARDS IDENTIFICATION

GENERALLY APPLICABLE CONTROL MEASURES AND PROCEDURES:

If ARMATEX® SN substrate fibers or fabrics are processed at elevated temperatures, **Dimethyle Acetamide (DMAC)** may be volatilized. Use adequate ventilation to maintain DMAC concentration below the exposure limit.

DMAC is readily extracted from ARMATEX® SN substrates in scouring, dyeing, washing and solution-treating operations commonly used in textile processing. Care should be exercised to assure that process liquids contaminated with DMAC are contained so as to avoid releases to the environment through sewers, etc. Practice good industrial hygiene during cleanup and while handling liquids containing DMAC.

SECTION 3 • COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL / COMMON NAME	C.A.S. NUMBER	% BY WEIGHT (opt)
• Poly (isophthaloyl-chloride-m-phenylene-diamine) (NOMEX® meta-aramid polymer)	25765-47-3	
• Silicone - Polysiloxane		
• N, N-dimethylacetamide (DMAC)	127-19-5	
For 1.5 dpf fiber		<1
For 2.0 dpf fiber		<2
For >2.0 dpf fibers		<3
• Zinc Borate	10192-46-8	

SECTION 4 • FIRST-AID MEASURES

EMERGENCY/FIRST AID PROCEDURES

SKIN: Rinse contacted areas with room temperature to cool water, then wash gently with mild soap.

EYE: Remove contact lens. Flush eyes with clear water for at least 15 minutes - seek medical attention.

INHALATION: Move person to fresh air. Seek medical attention if irritation persists.

INGESTION: Ingestion of this material is not likely. If it does occur, watch for several days to make sure intestinal blockage does not occur. If there is blockage, seek medical attention.

SECTION 5 • FIRE-FIGHTING MEASURES

FIRE AND EXPLOSION DATA: ARMATEX® SN products are inherently flame-resistant but can be ignited (limiting oxygen index approx. 28). The limiting oxygen index decreases to 21 as the temperature approaches 570°F.

FIRE AND EXPLOSION HAZARDS: When forced to burn, ARMATEX® SN substrates are converted to carbon dioxide, water, and oxides of nitrogen. However, carbon monoxide, small amounts of hydrogen cyanide, and various other chemical residues (some possibly toxic or irritating) may be produced, depending on conditions of burning. In small-scale evaluations, combustion products from ARMATEX® SN substrates appear to be of the same order of toxicity as smoke from burning wood and/or other natural combustible materials. Off gasses from thermal decomposition of

some fiber lubricants may contain very small amounts of such chemicals as formaldehyde, ethanol, acetic acid, acetone, etc. The conditions would not be expected to reach concentrations that present a significant health hazard. Small amounts of visible smoke are produced during combustion in air.

EXTINGUISHING MEDIA: Not required.

SPECIAL FIRE FIGHTING INSTRUCTIONS: Wear self-contained breathing apparatus.

NOTE: ARMATEX® SN products are inherently flame-resistant. However, if combustible materials are collected on fiber constructions, such as fabrics, filter media, etc., and exposed to an ignition source, these materials may ignite. Further, the presence of noncombustible dusts such as copper oxide, iron oxide, and lead oxide may negate the inherent flame resistance of this fiber.

SECTION 6 • ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Use appropriate personal protective equipment during cleanup.

SECTION 7 • HANDLING AND STORAGE

WASTE DISPOSAL: ARMATEX® SN products are not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). In general, dispose in accordance with all federal, state, and local laws.



SECTION 8 • EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS/WORK PRACTICES

VENTILATION: Avoid breathing fibers, dust, and fumes. Follow good industrial hygiene practices for ventilation during cleanup. In particular, avoid the use of air jets to blow off equipment.

PERSONAL PROTECTIVE EQUIPMENT/PROTECTIVE MEASURES

RESPIRATORY PROTECTION: When mechanically working with this product, wear NIOSH/MSHA-approved respiratory protection for dust if there is potential for airborne exposure in excess of applicable limits, or if there is potential for irritation of the nasal passages due to the mechanical action of the fibers.

EYE PROTECTION: Splash-proof goggles are useful to prevent eye contact if there is potential for exposure to DMAC.

PROTECTIVE CLOTHING: Impervious gloves, aprons and other protective clothing as a preventative measure in case of potential exposure to DMAC.

EXPOSURE GUIDELINES

APPLICABLE RECOMMENDED EXPOSURE LIMITS, 8 HOUR TWA:

	<u>TLV</u>	<u>OSHA PEL</u>
DMAC	10ppm	10ppm

SECTION 9 • PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid – continuous multi-filament yarns with a wide range of total denier and staple of varying denier per filament and cut length.

COLOR AND ODOR: Various color – no odor.

pH: N/A

MELTING POINT: Does not melt. Thermal degradation with loss of product strength begins above 572°F.

BOILING POINT: N/A

EVAPORATIVE RATE (n-Butyl Acetate = 1): N/A

VAPOR PRESSURE: (mm Hg @ 20°C): N/A

% SOLUBILITY IN WATER: Insoluble in water. Soluble in DMAC.

SPECIFIC GRAVITY (water = 1): 1.38.

VISCOSITY: N/A

% VOLATILE BY VOLUME: N/A

POUR POINT: N/A

SECTION 10 • STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions of use.

INCOMPATIBILITY: None reasonably foreseeable.

HAZARDOUS DECOMPOSITION PRODUCTS: Begins to thermally degrade rapidly above 572°F. The thermal degradation rate increases with temperature. (See section 4)

HAZARDOUS POLYMERIZATION: Polymerization will not occur.

SECTION 11 • TOXICOLOGICAL INFORMATION

No effect of sensitization on animal or human reported.

SECTION 12 • ECOLOGICAL INFORMATION

Refer to SDS SECTION 13 for additional information.

SECTION 13 • DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: ARMATEX® SN products are not a hazardous waste as defined by regulations implementing the

Resource Conservation and Recovery Act (RCRA). In general, ARMATEX® SN waste materials may be discarded in accordance with state and local regulations governing the disposal of other common or non-RCRA-regulated waste materials.

DMAC in wastewater streams contributes to the Biological Oxygen Demand (BOD) but is readily biodegradable in conventional biological sewage treatment systems. Wastewater containing DMAC should be disposed of in accordance with state and local wastewater discharges.

SECTION 14 • TRANSPORT INFORMATION

UN/NA CODE: None.

PROPER SHIPPING NAME: Not regulated.

HAZARD CLASS: Non-hazardous.

DOT INFORMATION: Not regulated.

LABELS REQUIRED: None.

BILL OF LADING DESCRIPTION: Product name.

SECTION 15 • REGULATORY INFORMATION

CERCLA: ARMATEX® SN is not regulated as a hazardous waste under CERCLA and is not subject to the Superfund tax.

SARA TITLE III INFORMATION: ARMATEX® SN substrates contain small amounts of DMAC which is regulated under section 313 Emergency Planning and Community Right-To-Know Act (EPCRA) of SARA TITLE III.

CALIFORNIA PROPOSITION 65: This product, when used or processed at elevated temperatures, may volatilize N, N-Dimethylacetamide (DMAC), which is listed by the state of California as causing developmental toxicity or male reproductive toxicity.

SECTION 16 • OTHER APPLICABLE INFORMATION

This SDS is provided to comply with provisions of the Hazard Communications Standard (29 CFR 1910.1200).

ARMATEX® is a registered trademark of Mid-Mountain Materials, Inc., WA.

APPENDIX A

Within the name of the ARMATEX® SN silicone coated textile products, the color of the specific product is denoted by the insertion of a code letter between the S and the N, such as "ARMATEX® SWN", the "W" referring to a white color. Typical color denotations are as follows:

A	Aluminum (gray)	B	Black
DG	Dark Gray	G	Gray
N	Green	O	Orange
OD	Olive Drab	P	Pink
R	Red	S	Salmon
U	Blue	Y	Yellow

The corresponding number(s) refer to thickness of mat, weight of fabric, dimensions of rope, tape, sleeving, etc.

EXAMPLE:

• ARMATEX® SWN 24 = **S**ilicone **W**hite (color) **N**omex **24** ounces per square yard (finished weight).

DEFINITIONS

29 CFR 1910.134 & 1926.103:

OSHA Respiratory Protection Standards

29 CFR 1910.1200 & 1926.59:



	OSHA Hazard Communication
ACGIH	American Conference of Governmental Industrial Hygienists
ADR	Carriage of Dangerous Goods by Road (International Regulation)
CAA	Clean Air Act
CAS	Chemical Abstract Services
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
DOT	Department of Transportation
DSL	Domestic Substances List (Canada)
EEC	European Economic Committee
EINECS	European Inventory of Existing Commercial Chemical Substances
EPA	Environmental Protection Agency
EU	European Union
HEPA	High Efficiency Particulate Air
HMIS	Hazardous Materials Information System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
LC	Lethal Concentration
LD	Lethal Dose
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PIN	Product Identification Number
PNOC	Particulates Not Otherwise Classified
PNOR	Particulates Not Otherwise Regulated
RCRA	Resource Conservation and Recovery Act
RID	Carriage of Dangerous Goods by Rail (International Regulation)
SARA	Superfund Amendments and Reauthorization Act
STEL	Short Term Exposure Limit

TCLP	Toxic Chemical Leachate Program
TDG	Transportation of Dangerous Goods

TITLE III EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT – SECTION:

302	Extremely Hazardous Substances
303	Emergency Release
311	SDS/List of Chemicals
312	Emergency and Hazardous Inventory
313	Toxic Chemicals Release Reporting

TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

µm	micrometer (micron)
mm	millimeter
cm	centimeter
m	meter
f/cc	fibers per cubic centimeter
in	inch
oz	ounce
lb	pound
µg	microgram
mg	milligram
g	gram
kg	kilogram
mg/m ³	milligrams per cubic meter of air
mppcf	million particles per cubic foot
ppm	parts per million

N/A	Not Applicable
ND	No Data/Not Determined
NE	Not Established
NR	Not Regulated

To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy or completeness of such information. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible long-term adverse effects. To the extent that any hazards may have been mentioned in the publication, we neither suggest nor guarantee that such hazards are the only ones, which exist. Final determination of the suitability of any information or product for the use contemplated by any user, the manner of that use, and whether there is any infringement of any patents is the sole responsibility of the user. We recommend that anyone intending to rely on any recommendation or to use any equipment, processing technique, or material mentioned in this publication should satisfy himself as to such suitability and that he can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufacturers' or suppliers' current instruction for handling each material they use.