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SDS No. AXSN2

Revised/Reviewed: 06/30/2016

Revised From: 07/28/2015

SECTION 1 • PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME OR NUMBER: ARMATEX® SN silicone coated Aromatic Polyamide Fabric (Robotex Fabric)

COMPANY:	PANY: Mid-Mountain Materials, Inc.		TELEPHONE:	206-762-7600
ADDRESS:	Office:	PO Box 800 2731 77th Ave, SE. Ste. 100 Mercer Island, WA 98040	EMERGENCY TELEPHONE NUMBER:	800-382-2208
			FAX:	206-762-7694
	Plant:	18825 67th Ave. NE Arlington, WA 98223		

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	<u>% BY WEIGHT (opt)</u>	
 Poly (meta-phenyleneisophthalamide) 	25035-33-0		
 Silicone – Polysiloxane Compound 			
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. If fiberglass becomes embedded, seek medical attention.

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





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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 $572^{\circ}F$.

BOILING POINT: N/A

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

VAPOR PRESSURE: (mm Hg @ 20°C): NA

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

SPECIFIC GRAVITY (water = 1): 1.38.

VISCOSITY: NA

% 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 $^{\circ}$ 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

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): There is no reason to believe that ARMATEX® SN products contain any of the substances known to the State of California to cause cancer or reproductive toxicity, and they are presumed to be absent.

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-RCRSA-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: Non-regulated

HAZARD CLASS: Non-hazardous.

DOT INFORMATION: Not regulated.

LABELS REQUIRED: None.

BILL OF LADING DESCRIPTION: product name

SECTION 15 • REGULATORY INFORMATION

CERCLA: ARMATEX $\ensuremath{\mathbb{R}}$ 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.

SECTION 16 • OTHER APPLICABLE INFORMATION

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

 $\mathsf{ARMATEX} \circledast$ 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:

DGDark GrayGGrayNGreenOOrangeODOlive DrabPPinkRRedSSalmonUBlueYYellow	Α	Aluminum (gray)	В	Black
OD Olive Drab P Pink R Red S Salmon	DG	Dark Gray	G	Gray
R Red S Salmon	Ν	Green	0	Orange
	OD	Olive Drab	Р	Pink
U Blue Y Yellow	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 = <u>S</u>ilicone <u>W</u>hite (color) <u>N</u>omex <u>24</u> 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





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CAS CERCLA	Chemical Abstract Services Comprehensive Environmental	TITLE III ACT – SE	EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW
CLKCLA	Response, Compensation and Liability Act		Extremely Hazardous Substances
CFR	Code of Federal Regulations		Emergency Release
DOT	Department of Transportation		SDS/List of Chemicals
DSL	Domestic Substances List (Canada)		Emergency and Hazardous Inventory
EEC	European Economic Committee		Toxic Chemicals Release Reporting
EINECS	European Inventory of Existing Commercial Chemical	515	Toxic chemicals release reporting
LINLOO	Substances	TLV	Threshold Limit Value
EPA	Environmental Protection Agency	TSCA	Toxic Substance Control Act
EU	European Union	TWA	Time Weighted Average
HEPA	High Efficiency Particulate Air	WHMIS	Workplace Hazardous Materials Information System
HMIS	Hazardous Materials Information System	_	· · · · · · · · · · · · · · · · · · ·
IARC	International Agency for Research on Cancer	μm	micrometer (micron)
IATA	International Air Transport Association	mm	millimeter
IMDG	International Maritime Dangerous Goods Code	cm	centimeter
LC	Lethal Concentration	m	meter
LD	Lethal Dose	f/cc	fibers per cubic centimeter
NFPA	National Fire Protection Association	in	inch
NIOSH	National Institute for Occupational Safety and Health	oz	ounce
NTP	National Toxicology Program	lb	pound
OSHA	Occupational Safety and Health Administration	μg	microgram
PEL	Permissible Exposure Limit	mg	milligram
PIN	Product Identification Number	g	gram
PNOC	Particulates Not Otherwise Classified	kg	kilogram
PNOR	Particulates Not Otherwise Regulated	mg/m ³	milligrams per cubic meter of air
RCRA	Resource Conservation and Recovery Act	mppcf	million particles per cubic foot
RID	Carriage of Dangerous Goods by Rail (International	ppm	parts per million
	Regulation)		
SARA	Superfund Amendments and Reauthorization Act	N/A	Not Applicable
STEL	Short Term Exposure Limit	ND	No Data/Not Determined
TCLP	Toxic Chemical Leachate Program	NE	Not Established
TDG	Transportation of Dangerous Goods	NR	Not Regulated
			not nogulated

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.

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