

# Safety Data Sheet

## Section 1: Identification

Product: 19 oz Aluminized Carbon Kevlar (ACK)

*Manufacturers Identification:*

John Tillman Co.  
1300 W Artesia Blvd  
Compton, CA 90220  
800-255-5480

Last revised: 6/19/14

Tillman Aluminizes Carbon Kevlar (ACK) products are a woven fabric consisting of an aramid fiber blend over an oxidized PAN (OPF) core yarn, and an aluminum film on one side. The suggested applications include safety clothing, curtains, and molten metal splash protection.

## Section 2: Hazard Identification

*There are no hazardous ingredients in this product according to OSHA 29 CFR 1910.1200.*

*Hazard:* Irritant

*Acute exposure:* Although the textile itself is not considered toxic or hazardous- dust from cutting and application may cause irritation to the respiratory tract and cause symptoms similar to bronchitis. The product has a very low order of acute toxicity and ingestion is not expected to cause any harm.

The exposure limit for particulate not otherwise regulated is 15 mg/m<sup>3</sup> total dust and 5 mg/m<sup>3</sup> respirable dust

*Primary Routes of Exposure:* eye contact, skin contact and inhalation may cause temporary irritation.

## Section 3: Composition and Information on Ingredients

<i>Ingredients</i>	<i>% w/w</i>	<i>CAS #</i>
Para-aramid	22%	26125-61-1
Oxidized polyacrylonitrile	62%	308060-39-1
Aluminized Film	16%	n/a

## Section 4: First-Aid Measures

*Inhalation:* If irritation occurs, move to fresh air

*Skin Contact:* If irritation occurs, wash with water and mild soap

*Eye Contact:* If irritation occurs, gently rinse the affected area with clean water for at least 15 minutes.

*Ingestion:* Rinse mouth with water and seek medical attention

If in any case irritation persists please seek medical assistance.

## Section 5: Fire-fighting Measures

*Suitable Extinguishing Media:* dry chemical powder, foam, fog, carbon dioxide or water.

*Specific Hazards:* not explosive. The product itself will not burn but its packaging may.

Flash point: n/a

Auto Ignition temp: n/a

Flammability limits: n/a

*Special Protective Equipment:* Self-containing breathing apparatus, protective clothing, gloves and a helmet.

## **Section 6: Accidental Release Measures**

*Personal Precaution:* Do not breathe in fiber dust; use a respirator if there is a lot of dust.

*Methods and Materials for Containment:* Scoop up dust and fibre mechanically, ideally with a vacuum cleaner to avoid spreading it into the air. Also, avoid dust and fibre spillage into drains and sewers.

## **Section 7: Handling and Storage**

*Precautions for Safe Handling:* Avoid contact with eyes and skin. Wear suitable protective gear when cutting and working with the material. For large rolls use appropriate mechanical devices. Avoid breathing in dust. Handle in accordance with good industrial hygiene and safety practices.

*Conditions for Safe Storage:* Store in a cool, dry, well ventilated location

## **Section 8: Exposure Controls/ Personal Protection**

*Exposure Controls:* Not directly subjected to any exposure regulations (OSHA, PEL, ACGIH, TLV or NIOSH-REL) Respirable fiber-shaped particulates (RFP) may be released from cut-fibers. It is recommended to keep these levels below 5 mg/m<sup>3</sup>.

*Appropriate Engineering Controls:* Ventilation- local exhaust ventilation should be provided as necessary to maintain exposures below occupational exposure limits.

*Individual Protection Measures:* The following precautions are advisable during cutting and fabrication or other operations that could generate dust while using this material.

If the level of dust in the air exceeds occupational exposure limits regulated under OSHA regulations 29 CFR 190.134 use properly fitted NIOSH/MHSA approved dust respirator.

Eye protection: Safety glasses, goggles, or face shields, as necessary.

Protective clothing: wear loose fitting long sleeve shirt and pants to protect areas from exposure to dust. The use of barrier creams can, in some instances, be helpful.

## **Section 9: Physical and Chemical Properties**

*Appearance:* light green and aluminized one side

*Odor:* none

*Odor Threshold:* n/a

*pH:* n/a

*Melting/ Freezing Point:* n/a

*Initial Boiling Point:* n/a

*Flash Point:* n/a

*Evaporation:* n/a

*Flammability:* none flammable

*Upper/Lower Flammability:* n/a

*Vapor Pressure:* n/a

*Vapor Density:* n/a

*Relative Density:* >1 g/cm<sup>3</sup>

*Solubility:* insoluble in water

*Partition coefficient:* n/a

*Auto-ignition Temp:* n/a

*Decomposition Temp:* 572°F 300°C

*Viscosity:* n/a

## **Section 10: Stability and Reactivity**

*Chemical Stability:* Stable under normal conditions

*Possibility of Hazardous Reaction:* none reasonably foreseeable

*Incompatible Materials:* Extremely strong bases or acids can cause chemical decomposition (hydrolysis) of the molecules if exposed for an extended period of time which can release harmful byproducts. Long exposure to UV light can negatively affect the strength and color of the base fabric.

*Hazardous Decomposition Products:* Thermal decomposition starting at temperatures above 572°F (300°C) may release toxic or hazardous products such as carbon monoxide, carbon dioxide, silicon dioxide, nitrogen oxides, small amounts of hydrogen cyanide and ammonia.

*Hazardous Polymerization:* Will not occur.

## **Section 11: Toxicological Information**

*Routes of Exposure:*

*Inhalation:* Acute LC<sub>50</sub> is unknown. Repeated inhalation of RFP can cause bronchitis like symptoms.

*Skin:* Dermal toxicity is unknown. Slight skin irritation has been observed in isolated cases. No chronic effects are known for this product.

*Eyes:* While this product has not been tested, it is expected that it would be minimally irritating to the eyes based on tests with similar products.

*Ingestion:* Oral LD<sub>50</sub> is not available for this product. There are no known chronic effects.

*Acute Toxicity:* unknown

IARC, NTP, ACGIH or OSHA does not classify this material as a carcinogen or suspect carcinogen.

## **Section 12: Ecological Information**

*Ecotoxicity:* n/a

*Persistence and Degradability:* n/a

*Bioaccumulative potential:* n/a

*Mobility in Soil:* n/a

This product is not considered harmful to aquatic organisms nor to cause long-term adverse effects to the environment.

## **Section 13: Disposal Considerations**

Disposal should be in accordance with relevant national and local regulations pertaining to the disposal of non-hazardous waste. Do not dump dust particles into sewers or anybody of water.

## **Section 14: Transport Information**

*UN Number:* n/a

*Shipping Information:* Not regulated for transport.

**All information and recommendations are presented in good faith and are believed to be correct but no warranty, expressed or implied is made. All materials should be handled with reasonable caution.**