



INDUSTRIES 3R

# MATERIAL SAFETY DATA SHEET

## IDENTITY

Part Number: **AKA 308**  
 Identity: Aluminised Aramid Fabric  
 Description: Aluminised Aramid Fabric  
 Other Generic Names: None

## SUPPLIER

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## COMPOSITION / INFORMATION ON INGREDIENTS

The yarns in these products are made using a core/sheath technology. The yarn core is made from continuous filament borosilicate E Glass fibres (CAS-65997-17-3). The sheath is made from a blend of para and meta-aramid fibres (CAS numbers 26125-61-1 and 25765-47-3 respectively). The outer surface of the product is made from Polyethylene phthalate film, with a reflective layer of aluminium on each surface. The metallised film is bonded to the surface of the fabric by means of an aliphatic polyurethane adhesive, optimised for flame retardant performance. The adhesive contains a synergistic blend of Antimony Trioxide (CAS-1309-64-4) and Decabromodiphenyl ethane (CAS-84852-53-9). These compounded additives are fully bonded into the adhesive polymer and are not therefore present as free agents.

## PHYSICAL AND CHEMICAL PROPERTIES

Weights: See appropriate Product Data Sheets.  
 Appearance: Base fabrics are pale yellow. The aluminised surface is silver in colour.  
 Odour: The products have a slight odour.  
 Solubility in Water: Insoluble  
 Melting Point: Not applicable  
 Boiling Point: Not applicable  
 Vapour Pressure: Not applicable  
 Percent Volatile (vol.): Not applicable  
 Evaporation Rate: Not applicable

## STABILITY AND REACTIVITY

The products are stable when used for the intended industrial application.

## FIRE – FIGHTING MEASURES

Flammability: The products are inherently flame resistant. They will burn if an ignition source is maintained but flaming normally stops when the source is removed. Combustion products may vary according to temperature and conditions of combustion/pyrolysis. Principal combustion products may include carbon dioxide, carbon monoxide, small quantities of hydrogen cyanide and nitrogen oxides.

Special firefighting procedures: In a sustained fire, the products will give rise to irritant fumes and smoke. Appropriate forms of self-contained breathing apparatus should therefore be worn.

Extinguishing media: Use that appropriate to the surrounding fire.

**EXPOSURE CONTROL/PERSONAL PROTECTION**

Workplace exposure to aramid and mineral fibre dust should be kept to the minimum that is reasonably practicable and should not be allowed to exceed the exposure limits detailed below.

<u>Substance</u>	<u>Workplace Exposure Limit</u>			
	Long-term exposure limit (8-hour TWA reference period)		Short-term exposure limit (15-minute reference period)	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
p-aramid (respirable fibres)	--	0.5 fibres per ml	--	--
Dust (inhalable)		10		
Dust (respirable) if inhalable dust exceeds or equals 10 mg/m <sup>3</sup>		4		
MMMf – Machine-made mineral fibres (glass fibre)	--	5 (2 fibres/ml)		

When used in an operation that gives rise to the generation of dust, the process should be closely monitored and provision of local exhaust ventilation should be considered as a control measure. Should this not be practicable, protective masks approved for use against irritant dust should be worn. (Take care to follow manufacturer’s instructions relating to the use of safety equipment). Accumulated dust should be removed using the safest practicable method, preferably by high efficiency particulate air (HEPA) filtered vacuum collection or wet cleaning.

To reduce the chance of skin irritation when handling these products, protective overalls of a closely woven structure should be worn. Gloves, arm cuffs or barrier creams may be advantageous in some circumstances. Emphasis should, always be placed on personal hygiene, ensuring that hands and arms are washed with copious quantities of cool running water to remove any loose fibres before the application of soap for washing purposes.

Where there is a possibility of dust or fibre residues entering the eye, suitable eye protection should be worn.

**HAZARD IDENTIFICATION**

The range of products covered by this data sheet are classified as non-hazardous articles under EC, REACH regulations and do not require a material safety data sheet (MSDS) or Safety Data Sheet (SDS), which are only required for chemical products and preparations. In response to customer needs and as a continuance of previous support, TBA will endeavour to generate information, using the MSDS format to distribute safety related information along the supply chain.

Under normal circumstances, these products do not pose any generalised health risk, but they do contain fibres which have notified exposure limits and must be controlled in line with section *Exposure control / Personal protection* requirements.

E-glass filaments are used as structural elements in these products. These are present as small diameter fibres, measuring approximately 9-microns across. Individual fibres may break horizontally into smaller lengths but will not divide longitudinally into fibrils of a smaller diameter. This size of filament is greatly in excess of the 3-micron limit below which a fibre may be classified as respirable. In this respect the glass fibres present within this product do not constitute an inhalable hazard. Direct exposure to glass fibres can lead to a temporary irritation of the skin, eyes, mucous membranes or upper respiratory tract. For these products however, the risk is significantly reduced as the glass fibres are located within the core of the yarn

from which the fabrics are woven. Nonetheless, care should still be taken to control and eliminate contact with loose fibres in so far as this is reasonably practicable.

The sheath of the yarn from which the products are woven comprises a blend of para and meta-aramid fibres. The manufacturers of these fibres have reported them to have the potential to release respirable dust and (respirable) fibre particulate during processing operations. In the finished products, this hazard is of limited nature and is only likely to occur if the fabrics are damaged by excessive mechanical abrasion during fabrication activities. It should be noted however that prolonged inhalation of aramid fibres of respirable size may cause lung damage. Significant concentrations of airborne aramid fibres / dust can also cause irritation of the eyes, nose and respiratory system, whilst prolonged skin contact with aramid fibres (accompanied by rubbing) can, in some cases cause mild irritation and redness.

### **FIRST AID MEASURES**

- Inhalation: In the unlikely event of excessive inhalation of dust, (or fumes from a sustained fire situation), remove the individual to the fresh air. Obtain medical advice.
- Skin Irritation: In the unlikely event of skin irritation, wash affected part with mild soap and water. If irritation persists, obtain medical advice.
- Eye Irritation: Irrigate eyes if affected by entry of dust. Obtain medical advice if irritation persists.

### **DISPOSAL PROCEDURES**

The disposal of waste should be carried out in accordance with national or regional directives - normally by burial in controlled industrial landfill sites.

### **ACCIDENTAL RELEASE MEASURES**

If these products are rendered friable, personal protective equipment should be used.

### **HANDLING AND STORAGE**

Contact with textile fibres (particularly E-glass) may cause reddening or itching of the skin. Those who are subject to this effect are most likely to experience it when handling the materials for the first time. Those with a history of skin complaints may be particularly susceptible and, in general, should avoid direct contact with these products. In such circumstances the use of PPE should be considered - see section *Exposure control / Personal protection*.

Day to day handling of these products is unlikely to give rise to the generation of dust but may occur in circumstances where physical or mechanical abrasion of the product gives rise to the generation of particulate debris. This condition may arise for example when cutting parts to size or perforating holes through the fabric. In such circumstances best working practices should be adopted to minimise and contain any particulates released. If these products are used in a manufacturing process that generates dust, exposure controls detailed in section *Exposure control / Personal protection* must be followed.

It is recommended that the fabrics are stored within their original wrappings, out of direct sunlight and in a dry location until ready for use. No special storage conditions are required on health grounds.

### **TOXICOLOGICAL AND ECOLOGICAL INFORMATION**

Primary Routes of Potential Exposure

Effects of Over-exposure (Acute and Chronic)

- Inhalation (Dust): Prolonged inhalation of respirable dust and respirable fibre particulates at high concentrations can cause lung damage.
- Skin Irritation: Contact with textile fibres (particularly E-glass) may cause reddening or itching of the skin.
- Eye Irritation: Entry of fibrous dust particles into the eye will cause 'foreign body' irritation.
- Carcinogenicity: Fibres used in these products are not classified as carcinogens.

These products are not associated with any known ecological problems.

**TRANSPORT INFORMATION**

These goods are considered non-hazardous for transportation purposes. They are suitably packaged to prevent damage or ingress of water.

**REGULATORY INFORMATION**

No specific regulatory information is applicable to these products.

**DISCLAIMER**

The information, details, dimensions and values indicated are to our best knowledge. We recommend testing according to local conditions. The specifications are subject to change without notice.