



INDUSTRIES 3R

# MATERIAL SAFETY DATA SHEET

## IDENTITY

Part Number: **RKA 408**  
 Identity: Aluminised Rayon Fabric  
 Description: Aluminised Rayon Fabric  
 Other Generic Names: None

## SUPPLIER

Industries 3R inc.  
 55, route 116 Ouest  
 Danville (Québec) J0A 1A0  
 Tel: 819-839-2793  
 Fax: 819-839-2797

## HAZARD IDENTIFICATION

Textile products are classified as non-hazardous articles under EC, REACH regulations and do not require a Material Safety Data Sheet (MSDS) / Safety Data Sheet (SDS), which are only required for chemical products. Under normal circumstances and conditions of use TBA products do not pose any generalised hazard or health risk. In response to customer needs, and as a continuance of previous support TBA will generate information using the MSDS format to convey safety information down the supply chain as the need arises.

## COMPOSITION / INFORMATION ON INGREDIENTS

Base fabric: Flame resistant viscose rayon fabric, manufactured from cellulose fiber (CAS-9004-34-6) and incorporating a flame retardant pigment (CAS-4090-51-1).  
 Surface layer: Dual-surface metallised, Polyethylene Terephthalate (PET) film.  
 Bonding Agent: Flame retardant polyurethane adhesive. The adhesive contains minor quantities of compounded additives which are fully dispersed with in the structure of the adhesive and are not present as unbound chemicals. These additives give the product the required performance characteristics.  
 These include: Antimony trioxide flame retardant (CAS-1309-64-4)  
 Decabromodiphenyl ethane (CAS-84852-53-9)

## PHYSICAL AND CHEMICAL PROPERTIES

Weights: See appropriate Product Data Sheets  
 Appearance: Cream colored on fabric side, aluminised on the other side  
 Odor: No discernible smell.  
 Solubility in Water: Insoluble  
 Boiling Point: Not Applicable  
 Vapor Pressure: Not Applicable  
 Percent Volatile (vol.): Not Applicable  
 Evaporative Rate: Not Applicable

## FIRE – FIGHTING MEASURES

Flammability: The materials are inherently flame resistant.  
 Special fire-fighting procedures: In a sustained fire the base fabric will degrade and the flame retardants and constituents will give rise to irritant fumes and smoke, including carbon monoxide, carbon dioxide, halogen and nitrogen containing gases including HCN. Appropriate personal protection and approved forms of self-contained breathing apparatus should therefore be worn in such situations.

Extinguishing media: Use that appropriate to the surrounding fire.

**STABILITY AND REACTIVITY**

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

**TOXICOLOGICAL AND ECOLOGICAL INFORMATION**

Toxicological: Primary Routes of Exposure: Inhalation, contact.

Effects of Over-exposure:

- Inhalation: Dust generated consequent to the mechanical disintegration of the fabric could be irritant to the upper respiratory tract. When subjected to thermal degradation or direct to flames, fumes and gases will be generated. These will be irritating to the nasal passages and harmful to health. If inhaled in sufficient quantities these fumes could be toxic. The nature and extent of the fumes will depend on the localised conditions of pyrolysis and could include oxides of carbon and nitrogen together with other organic compounds. Some metal oxides could also be present.
- Carcinogenicity: Fibers in this product are listed as carcinogens.
- Skin Irritation: The manufacturers of the fibers present in this product claim that contact with their materials is not likely to produce adverse skin effects.
- Eye Irritation: Entry of fiber into the eye could cause foreign body irritation.

Ecological: The materials used in these products are not associated with any known ecological problems.

**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.

**EXPOSURE CONTROL/PERSONAL PROTECTION**

If produced in sufficient quantities, fibrous particles generated by mechanical disintegration of the base fabric could be irritant to the upper respiratory tract. In such circumstances, the workplace exposure should be controlled within the tabulated limits below.

Substance	Workplace Exposure Limit				References see section other information
	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>	
Cellulose dust (inhalable) CAS-9004-34-6		10		20	1 & 2
Cellulose dust (respirable) CAS-9004-34-6		4			1 & 2
Dust (inhalable)		10			1 & 3
Dust (respirable) If inhalable dust exceeds or equals 10 mg/m <sup>3</sup>		4			1 & 3

In circumstances where dust is generated, the provision of local exhaust ventilation should be considered. If this is not practicable, protective masks approved for use against irritant dust should be worn in accordance with the manufacturer’s published instructions.

### **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:	The Polyethylene Terephthalate film is considered biologically inert. 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.

### **ACCIDENTAL RELEASE MEASURES**

Fabric that is fire damaged, or rendered friable by any other means should be handled with the use of personal protective equipment.

### **HANDLING AND STORAGE**

Day to day handling of these products is unlikely to give rise to the generation of dust. Control measures will rarely be required but may be necessary 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. The production of debris should be controlled and minimised in accordance with good working practice. Accumulated dust should be removed using the safest practicable method, preferably by high efficiency particulate air (HEPA) filtered vacuum collection or wet cleaning. 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.

### **TRANSPORT INFORMATION**

Aluminised rayon products are non-hazardous for transport. They are suitably packaged to prevent damage and ingress of water.

### **REGULATORY INFORMATION**

No specific regulatory information is applicable to these rayon cloths.

### **OTHER INFORMATION**

The information provided in this Health & Safety Data Sheet is based on our current knowledge.

#### References

1. Health & Safety Executive Guidance Note EH 40/2005 Workplace Exposure Limits – second edition published 2011
2. EH40/2005: Cellulose, Page 14.
3. EH40/2005: Para 44, Page 33 (Dust of any kind when present at a concentration in air equal or greater than 10mg.m<sup>-3</sup> 8-hour TWA of respirable dust)