Technical Textiles

PROTECT® FR COTTON WOVEN FABRIC

Product Description

Garments made by FR treated cotton fabric are guaranteed flame resistant for the specific washes of the garment by the fabric manufacturer.

FR treatment and dying goes simultaneously. In dying, we can achieve any color in reactive dyes or vat dyeing.

Following 3 types of FR treatment we offer

a) Using chemical from Huntsman Swiss. Chemical can get all certificates for guaranties for Customers. Guaranties of 50 washes for FR treatment is provided.

b) Using chemical from THOR Britian. Chemical can get all certificates for guaranties for Customers. Guaranties of 50 washes for FR treatment is provided.

c) Using Unbranded chemicals . Mostly used for lining fabric for furnitures. Where washes are not that important guarantee of 10 washes are given.

Effect of Acids and Alkalis

Cotton is resistant to alkalis and most solvents, but many acids will completely destroy cotton, both FR and non-FR. The fabric does not provide personal chemical protection to the wearer. Where chemical exposure is a hazard, appropriate specialized barrier garments should be selected.

Effect of Bleaches and Solvents

Bleach resistance deserves special comment. Cotton itself is unaffected by chlorine bleach if it is properly used (correct temperature and pH ranges). However, repeated chlorine bleach launderings will destroy the flame retardant polymer in treating cotton fabric. Chlorine bleach must not be used on flame retardant treated cotton fabrics. Detergents containing bleach alternatives (sodium perborate) are acceptable for home laundering, but industrial laundry detergents containing hydrogen peroxide must not be used.

The effect of Mildew, Aging, Sunlight and Abrasion

Cotton has relatively poor resistance to mildew, aging, and sunlight. Abrasion resistance is also relatively poor. Direct exposure to ultraviolet rays in welding can result in fabric damage, including strength and color loss, caused by Actinic degradation.

Thermal Stability

FR cotton fabric has good resistance to dry heat and is a natural insulator. Phosphorus treated 100% cotton cannot be used around molten white metals such as aluminum, magnesium, or zinc. Because of the low surface tension of these substances in liquid form, they will stick to FR cotton.

Moisture Regain/Static Control

Moisture regain of cotton is excellent which results in low static propensity. However, since static control depends on ambient relative humidity, the fabric should not be considered for applications where critical static control is required. It is especially important that these garments not be donned or removed in a hazardous area.

Features

- Protection from heat and flame.
- Flame resistant through 50 washes

Material
FR treated woven fabric

Fabric Width
60inch ± 1

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Fabric Weave
1/1 plain, 3/1 twill

Fabric weight
210-220gsm, 240-250gsm, 280-290gsm and special gsm on demand can be produced.

Color
Black, R. Blue, Navy Blue, Red, Orange, D. Tan, Gray, White and special color on demand can be produced.

Applications

- Personal protective clothes.
- Oil/Gas work uniform.
- Racing wear.
- Firefighter suits.
- Tank suits.
- Lab Jackets.

For metal industry, petrochemical industry, armed forces, police force, firefighting force, fire brigades, and utility worker. To offer the extra protection against the multiple risks of fire, heat.

FR Test
EN ISO 11612: 2008

Care

- Wash garments of FR treated garment separately from other fabrics/garments.
- Machine wash. Hot water (60 C)
- Tumble dry low (160 F/71 C)
- Do not use chlorine beach nor detergents containing chlorine bleach.
- Press with an adapted low pressure, or for a short period of time dehydration.
- Use proper washing water which is free from dyes/iron/manganese.
- When using commercial laundry aids, be sure to read and carefully follow the manufacturer's instructions.
- Do not line dry in sunlight.

Packing
Fabric will be rolled on tube.
Every roll will be packed in polythene bag.