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 Fax Note
 To JOSH
 Fax# 773-523-0765
 From Monica Wilcox
 Phone# 201 572 5110 Ext 217

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE

Commercial Product Name	Flame Retardant Kuralon T-18
Company	Kuraray Co., Ltd. Textile Sales Department II. 1-12-39, Umeda, Kita-ku, Osaka, 580 Japan TEL.: +81-6-348-2400 FAX.: +81-6-348-2800

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Name	Formalized Polyvinyl Alcohol
Formula	$[-CH_2-CH(OH)]_n-[-CH_2CH-CH_2-CH]_m-$ O-CH ₂ -O
CAS-No.	9002-89-5
Concentration	Formalized Polyvinyl Alcohol ; 64~72% Polyvinyl chloride; 26~31% Stannic Oxide; 2~5% Pigment; 0~4%

3. DANGER AND HARM CATEGORY

Kind of Category	There is no suitable category for the product in the Danger and Harm Category.
Dangerous Property	Designated as non-hazardous and flame retardant solid but flammable by the Fire
Harmful Property	Polyvinyl Alcohol is almost no-harmful material and registered on Japanese Pharmaceutical Codex and The Japanese Standards of Cosmetic Ingredients (Notified by Ministry of Health and Welfare).

4. FIRST AID MEASURES FOR FABRIC DUST

Eye Contact	Wash eyes with water to remove dust.
Skin Contact	Wash affected area with water to remove dust.
Inhalation	Not applicable
Ingestion	Not applicable

5. FIRE FIGHTING MEASURES

Extinguishing Method	By removing the other flammable material, fire is extinguished. Caution not to inhale a small quantity of HCl and Cl ₂ gas generated during burning.
Extinguishing Media	Water, Powder extinguisher and CO ₂ extinguisher

6.ACCIDENTAL RELEASE MEASURES

Fiber	Gather with sweeper and keep spilled material in the vessel. If the recovered material is not reusable, it should be burned out like the normal dust. After removing most of the fiber, thoroughly wash area with cold water to remove residual fiber because floors covered with residual fiber slippery when wet.
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7.HANDLING AND STORAGE

Handling	Not necessary special protection. Because the material has over 3μ m diameter and over 500μ m length with no fibrillation.
Storage	1.Store indoors away from wet areas . 2.Avoid high temperature and humidity since Polyvinyl Alcohol has a nature to absorb humidity from the atmosphere.

8.EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Controls	Not necessary
Protective Equipment	Not necessary

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Fiber
Color	Clear and white or pale yellow except dope dyed products
Volatile	Not applicable
Melting Point	Above 200°C
Specific Gravity	1.3
Specific Heat	$1.68 \times 10^3/\text{kg}^{\circ}\text{C}$
Softening Temperature	$220\sim 230^{\circ}\text{C}$
Combustion Heat	$1.1 \times 10^4/\text{mol}$
Solubility	Insoluble or rarely soluble in general organic solvents like BTX.

10.FIRE AND EXPLOSION HAZARD

Flash Point	Above 70°C
Ignition Temperature	440°C
Flammability	A little
Auto Ignition/ Reactivity with Water	Not applicable
Spontaneous Combustion/ Explosion	Not applicable

Stability/ Reactivity	Stable
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11. TOXICOLOGICAL INFORMATION

Toxicological Information	No data
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12. INFORMATION ON ENVIRONMENTAL EFFECT

	No data
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13. DISPOSAL CONSIDERATION

	For the landfill the waste treatment is entrusted by local self-governing body or public industrial waste dealer. If incinerated, refer to local pollution regulative due to small quantity of HCl or Cl ₂ gas that is generated as product of combustion.
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14. TRANSPORT INFORMATION

	Cover the product with a hood or a seat to avoid rain.
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15. RULES AND REGULATION

The Fire Service Law	Denoted as non-hazardous solid but denoted as flammable solid by the Fire Prevention Ordinance in JAPAN.
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