

Reg. No: 001520 Issue: 1

Doc. Date: 10.2011 English Version

# **NOBLAZE**

# **NNT**

#### PRODUCT INFORMATION

#### **DESCRIPTION**

**NOBLAZE** <sup>®</sup> **NNT** is an efficient cyclic ester phosphate flame retardant and it is specially formulated for polyester. It is non-corrosive with high phosphorus content and excellent water solubility. NOBLAZE NNT can durable for 50 times laundry washing at a temperature of 140° F.

CHEMICAL NAME

Cyclic Ester Phosphate Flame Retardant

### **SPECIFICATIONS**

PARAMETERS	LIMITS
pearance Colorless to yellowish clear I	
Active Content, %	93 min
рН	1.5 - 5.5
Specific Gravity, (at 25°C)	1.10 - 1.40

## **TYPICAL PROPERTIES**

Phosphorous Content, Weight % 18.5-21.0%

## **CHARACTERISTICS**

- Outstanding flame resistant with more than 50 times laundry washing.
- Easy to operate.
- Friendly to environment, it is non-toxic, low volatility and safe to use.
- Show excellent performance with using small amount of chemical.
- After flame retardant treatment, the character of textile still is maintained.

#### **PACKING**

250kg per drum

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#### **APPLICATIONS**

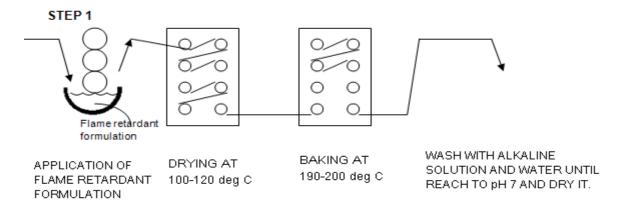
# 1) <u>Alkaline Pre-Treatment:</u>

- Since absorbable of polyester is weak, alkaline pre-treatment is suggested to do before flame retardant treatment.
- Prepare a mixture solution which contains 5% NaOH solution (10-30g/l) and 1-2g/l cationic surface active agent then soak the cloth into mixture. Immerse the cloth at 95-100°C for 30-50 minutes. This method is to remove soils and oil in the cloth.
- After that, wash the cloth with water until it reaches to pH 7 and dry it.

# 2) Flame Retardant Treatment:

 Different types of fabric will use different amount of chemical, an ideal recipe is suggested as below:

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Fabric Weight (g/m²)	500-700 (Thick Cloth)	100-500 (Thin Cloth)
NOBLAZE NNT (g/L)	155-300 g/L	200-400 g/L
Penetrating Agent JFC (g):	1	1
Water (g)	700-845 g/L	600-800 g/L



- 1. Prepare water in a tank and add NOBLAZE NNT based on types of fabric. The optimal chemical level is 0.16-0.2kg per 1kg of cloth.
- 2. The cloth will go through the flame retardant chemical tank before going to oven chamber.
- 3. In oven chamber, the cloth will undergo drying process at 100-120°C for 1-2min and baking process at 190-200°C for 1-3 min.
- 4. After flame retardant treatment, wash the cloth with 10% NaOH or Na<sub>2</sub>CO<sub>3</sub>, and water until the it reaches to pH 7 and dry it. With all these procedures, the flame retardant treatment is completed.

# TRANSPORT INFORMATION

Non-dangerous cargo.

The above information is, to the best of our knowledge, true and accurate, but any recommendations or suggestions which may be made are without guarantee, since the conditions of use are beyond our control.

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