

The best flame retardant for textiles, wood, etc.

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GP Fire Proof Agent



● Flame Retardant Performance Breakthrough

A combustion experiment was performed where the GP Flame Proof agent was applied to a shoji screen door frame and shoji paper. Flame was applied. While there was initial carbonization, the flame had self-extinguished.

● Water-based & Halogen-free

The active ingredient to this product is ammonium phosphate. As it is water-based, there are no uses of any volatile organic solvents (VOCs). Through numerous public testing trials and accumulated data, this product has been deemed safe for people and the environment with no toxic gases.

● Construction

Can be applied via brush, roller, spray, or whichever is applicable to the base material. Also, the equipment can be cleaned easily with water as the product is water-based.

● Purpose and Applications

○ Wood Based Materials

Flame retardant, non-combustible wood, plywood, MDF, chipboards, wooden doors & window frames, siding, general home materials, and tatami

○ Fiber Products

Flame proof curtain, cloth, clothes, carpets & rugs, and sofas

○ Paper Products

Flame retardant shoji sliding doors and screens, packaging paper, cardboard, books, paper cloth, and canvas

● Unchangeable Materials

The GP Flame Proof Agent is colorless and transparent.
It will not change the texture or discolor the object being applied to.

● The flame retardant can be applied through spraying or dipping.

Combustion Test ※This experiment was performed at the Ishikawa Prefecture Federation of Forestry Association



Right side: Regular lumber
Left side : GP Fire Proof treated lumber



The house on the right has caught fire.
The house on the left shows some carbonization,
but the flames have not ignited.



The flames have spread all over the roof
and the eaves for the house on the right.
The house on the left has not caught fire.

Grow Chemical Co. Ltd

28-4 Shimonoda, Sabae City, Fukui Prefecture, Japan 916-0073

Tel: 0778-62-3158 Fax: 0778-62-3160 E-mail: info@growchemical.com

Usage Instructions for GP Fire Proof Agent

○ Product Description

The GP flame proofing agent is a water-soluble, non-halogen, flame retardant agent.

This product is non-toxic, odorless, composed of a variety of flame retardants, and has a penetration enhancer with strong permeation. There are no uses of any volatile organic solvents (VOC) and is a safe and environment-friendly product. This product also will maintain its performance without compromising the texture, characteristics, color, etc as long as the material has a permeable surface.

○ Applicable Materials

Paper Products : shoji paper, wall paper, sliding doors, wrapping paper, cardboard, certificates & important documents

Fiber Products : curtains, carpets & rugs, window blinds, sheets, cushions, stuffed animals

Wood Products : various wood materials, wood-veneer, plywood, and other wood furniture and fixtures

Other Products : stage & blackout curtains, tents, track sails, important culture properties such as shrines and temples

* Will not work on materials with glossy or waterproof surfaces

* Will not be effective on cloth products that contain at least 20% synthetic fibers

* Will not work on the 'unbreakable shoji paper' that has been marketed in recent years

○ Product Application : Indoor use only (Outdoor use product is available as a top coat by the company)

○ Product Features

Item	Characteristics	Item	Characteristics	Item	Characteristics
Weight	20kg (18.2 liter)	Specific Gravity	1.100	Ignition Point	Does not ignite
Main Ingredient	Ammonium Phosphate (Food additives)	Weight	1.125 kg/liter	Volatile	None
	Ammonium Sulfate (Food additives)			Contractive	None
Secondary Ingredient	Water	Color	Clear	Corrosive	None
Total solid content	15%	PH	6.00	Hazardous	None

○ Usage Instructions

1) Surface Treatment

Prior to applying the GP fireproof agent, clear the material's surface of all dust, dirt, grease, etc.

Make sure the surface is dry before application.

2) Coating Work

GP Fire Proof Agent can be applied the following ways : ①Spraying • ②Brushing • ③Treating • ④Pressure Treating

①~③ is a method for coating paper and cloth products, ④ will be primarily a coating method for wood.

* Please try a small section of the material before applying to check for any discoloration or deformation.

①Spraying

Equipment : Sprayer or hand-spray

GP Fire Proof Agent : undiluted solution (recommended three coatings; be sure to apply a new coat after the previous coat has dried)

Spray at a distance of about 15cm~20cm from the surface and apply with thick coatings.

GP Fire Proof Agent permeates easily. Apply to both sides if possible and avoid sun exposure while drying.

②Brushing

Equipment: Water Soluble Brush (recommended three coating; be sure to apply three coats, apply a new coat after previous coat has dried)

GP Fire Proof Agent: undiluted solution

Dip the brush generously into the DP Fire Proof Agent and apply with thick coatings.

GP Fire Proof Agent permeates easily. Apply to both sides if possible and avoid sun exposure while drying.

③Treating

Equipment: A container that can allow the product to permeate. (pallet, bucket, etc.)

GP Fire Proof Agent: undiluted solution

Fill the container with the GP Fire Proof Agent and place the material inside the container. Allow the material to be treated for three minutes.

Afterwards, remove the material and shake off any remaining liquid. Avoid sun expose while drying.

④Pressure Treating

Equipment: Vacuum permeation apparatus (76cm Hg)

GP Fire Proof Agent: undiluted solution

First, calculate the size of the material you wish to treat with how much GP Fire Proof Agent will be required.

Afterwards, fill the equipment with enough GP Fire Proof Agent and test a small sample using the maximum allowance of negative pressure.

Remove the sample at 30 minute intervals. Calculate the proper time for pressure treating of the material until the permeation of the sample has been fully saturated. Once calculated, pressure treat the material until complete saturation. Afterwards, remove the material and shake off any remaining liquid. Avoid sun expose while drying.