# **HYDROSKY Product instruction manual**

## HYDROSKY SKY-FEU

Application: Water-soluble flame retardant Common name: inorganic penetrating flame retardant Standard: Internal standard

Features: The characteristic of SKY-FEU is aqueous mineral. Especially by spreading and dipping it on cloths such as flammable wood, baseboard plywood, corrugated cardboard and beddings and curtains and drying it enough it will change to flame retardant and will not change the texture and color of the material. It is possible that you can earn time to evacuate and rescue when a fire occurs, possibly stopping burns to others to a minimum.SKY - FEU does not contain organic solvents or hazardous substances at all, it has no smell and does not emit toxic gases even in case of an emergency fire.

## General properties

Main component: Highly reactive inorganic catalyst Appearance: 1 liquid Packing: 20 kg Specific gravity: 1.4 to 1.7 (20 ° C.) Viscosity: No data Solvent: water PH: 1.5 to 1.8 (strongly acidic)



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#### Indication of harmful substances Summary of hazards Explosives: Not applicable

Flammable liquid: Not classified Self-reactive chemicals: Not subject to classification Pyrophoric liquids: Not subject to classification Self-heating chemicals: Not subject to classification Water reaction flammable chemicals: Not classified Oxidizing liquid: Not classified Organic peroxide: Not applicable Metal corrosive substances: Classification not possible

Coating amount: depending on the material (0.12 to 0.25 kg/m2)

## **Construction precautions**

- 1. Shake well before using.
- 2. When using SKY-FEU, always use rubber gloves, goggles, masks.
- 3. In case of pre-coating (pre-coating) on wood, plywood board, plywood, apply strictly 2 and apply with a brush, roller or sprayer.
- 4. In the case of using it on existing wood, plywood board, plywood, also apply strictly 2 and apply it with a brush, a roller or a sprayer. Protect SKY-FEU splashes with a mask so as not to aspirate.
- 5. Wipe off the part where SKY-FEU has adhered with a wet cloth immediately.
- 6. Spray the curtains and beddings in a wellventilated place, or quickly dipping and dry thoroughly.
- 7. Since it is water-based, storage in winter, construction is preferable at room temperature, please avoid storage outside.
- 8. Do not penetrate painted surfaces or metals, especially iron may cause corrosion, so be careful.
- 9. Because it is strongly acidic, please handle with care. After use, please keep the container tightly closed and keep it out of reach of children.
- 10. In case of contact with eyes, wash immediately with plenty of water and consult a doctor.

## Combustion experiment : Experiment with a gas burner at 1400 ° C



Combustion experiment with a 3 mm thick plywood board Unprocessed will burn out in less than 2 minutes.

#### Left side: untreated - right side: flame retardant treatment



The plywood burns out suddenly. Flame retardant treated plywood only carbonizes.

#### Left side: untreated - right side: flame retardant treatment



Combustion experiment of cardboard for packaging. Start the experiment, start burning immediately.

#### Left side: untreated - right side: flame retardant treatment



Combustion experiment with a face towel.

There is no change in the texture of the material, and the flame retardant treatment part is carbonized to stop the flames and the burning.

Left side: Flame retardant treatment - Right side: Not processed