



**SKY PROTECTOR**



**SKY PROTECTOR**  
*Peering PLS*

Processing loquid that  
reacts to asbestos



Everything starts here  
**HydroSky Co.,Ltd.**

# SKY PROTECTOR

The dismantling of old buildings that may have used asbestos peaks around 2030 and the risk of being scattered around in the future is pointed out, so many buildings that use asbestos still remain in the country. According to the summary of the Ministry of Health, Labor and Welfare, the death toll from mesothelioma, one of the representative diseases caused by asbestos, reached about 1,300 in 2014, more than twice as high as twenty years ago. There are also research results that mesothelioma has a survival rate of about 30% two years after onset, there are many bereaved families who are suffering from economic difficulties suddenly losing the main pillars of the family. When removing existing coating film in dismantling work, it was difficult to remove the coating film without breaking it, so there were points to point out that asbestos contained may be scattered depending on the removal method. On April 28, 2016, "Technical Guidelines for Asbestos Dust Scattering Prevention Processing from Asbestos-Containing Building Finishing Coatings at Rebuilding and Dismantling of Buildings" was created.

## The nature of asbestos

- \$ Enduring high temperature without burning (heat resistance)
  - \$ Extremely high tensile strength (tensile strength)
  - \$ Flexible and resistant to wear (flexibility / abrasion resistance)
  - \$ Weave as a fabric (spinnability)
  - \$ Difficult to be attacked by chemicals (chemical resistance)
  - \$ Hard to pass electricity (insulation)
  - \$ Excellent adhesion to other substances (affinity)
- Moreover,
- \$ Price is very cheap! (Economy)

As a substance to be used for industrial products, such an excellent and convenient substance There is not. It was quite natural that asbestos was used in large quantities for all industrial products and civilian use before the unbelievable fact that this mineral damaged human beings was damaged.

## 【Industries used】

- \$ Building fields such as buildings ...
- \$ Automotive field
- \$ Chemical field for manufacturing chemicals etc.
- \$ Industrial machinery for manufacturing construction machinery etc.
- \$ Transportation fields such as trains and ships
- \$ School materials, experiment tools
- \$ Consumer field such as boiler...etc.



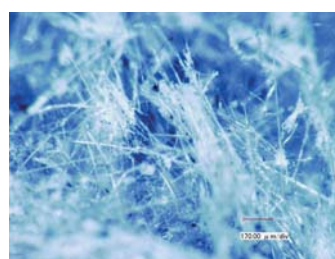
**Asbestos has many excellent features. Although it is superior in terms of ease of construction and economical, it has become toxic to the floating fiber.**



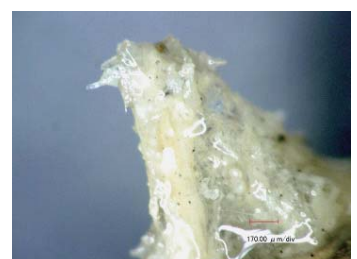
Asbestos gemstones



Fiber property can be confirmed well when enlarged



Unprocessed Asbestos  
Needle-like Expansion



Asbestos acicular crystals after  
solidification treatment

For the protection of outer wall painting during the growth period, in order to improve heat insulation, sound insulation, waterproofness, we have included asbestos in paint. However, it is already prohibited to use it for asbestos containing products and equipment. In demolition work, removal of outer wall paint is required to be demanded before dismantling. It is difficult to solidify asbestos-containing components with conventional release agents, and problems remain in processing needle fibers after peeling off paint.

**Sky Protector PE Plus** has made it possible to process needle fibers by vitrifying them and eliminating floating nature.



## Sky protector PE plus application status



24 hours passed after application



Asbestos-containing paint is included on the outer wall, and in recent years demolition work after peeling off paint has been increasing.



## SKY PROTECTOR [Exterior wall asbestos-containing paint stripper]

### Sky Protector PE Plus

- # Sky Protector PE Plus is a highly toxic (methylene chlorald) is not included at all.
- # Instead of dissolving the old coating film, it softens and peels off so it is easy to recover without scattering.
- # It has biodegradability, sky protector PE plus in wastewater decomposes and decontaminates bacteria in soil.
- # Enough fish poisoning safety.
- # Sky protector PE plus does not damage the surface.
- # Even when high-pressure cleaning is performed on the removal work, since the paint after peeling does not dissolve in water, wash water and waste are separated, so it can be safely processed.
- # 1 Protective material: Perform protective material (polyethylene film, etc.) to prevent scattering of release agent and coating film dust out of work area.
- # 2 Since:the coated amount differs depending on the state of the corresponding coating film, test is carried out beforehand. Approximately 0.3 to 1.0 (exterior thickness coated material) kg / m<sup>2</sup>. Stir well before construction.
- # 3 Leave: Penetrate to the old coating and interface and leave it until the coating softens.
- # 4 Removal: Remove the softened coating film with a scraper, ultrasonic isolator, etc.
- # 5 Waste material treatment: Waste material removed is treated according to the Industrial Waste Act.

### Product Summary

pH: 9.8 Occupational Safety and Health Act - Non-applicable Fire Law - Designated combustible material. PRTR law: Not applicable Appearance: greenish white viscous liquid. Specific gravity: 1.08

### Handling Precautions

1. When using, use protective gloves, protective glasses, foreclosure and so on. Polyethylene gloves and foot covers are effective.
2. Handle according to organic solvent poisoning prevention regulations.
3. Ventilation is adequate during work, gas in the solvent is heavier than air, so call careful attention to people downstairs.
4. Protect against work area and its surroundings because it is a polyethylene film in the range of scattering and contact.
5. Do not store or leave sky protector PE plus in direct sunlight or high temperature areas.
6. Do not use it within the usual storage condition for less than half a year, and do not return the used material to the original can.
7. The contents of this material may differ depending on the conditions of use at the site.

# SKY PROTECTOR

Each product of Hydro Sky has a long-term protection function, and it is necessary to repair many new construction work, renovation work or historic cultural property And has been adopted at various sites. In recent years, Hydro Sky has once again gained attention. The reactive component of Hydro Sky will develop into new material development and will continue to protect the environment and react again and again. Experience cultivated through new technologies and construction methods can be effectively used permanently for "asbestos" treatment agents. And Hydro sky protector PE plus was developed.

## Part of asbestos use case



Inside of the ceiling was used for fire resistant coating like this, it was used effectively for rust prevention of iron part, heat insulation and sound insulation.



By incorporating asbestos into exterior materials and paints, durability has improved much, exterior peeling and color fading are absent, especially high-rise buildings have been built close to the neighbors as much as possible. In dismantling, we have disassembled while using asbestos treatment from inside using the outer wall. In order to carry out the asbestos treatment of the outer wall paint first, there is a case that temporary installation can not be installed, and special construction method is required.

