



## Technical Specification

### Concrete Surface Densifier and Dust-proofer

ADOTUF is a VOC free, liquid sodium silicate solution. Adotuf is designed for use as a concrete surface densifier, hardener and sealer solution. This penetrating silicate solution reacts with the calcium present in the cement of the freshly cast concrete to produce insoluble calcium silicate hydrate within the concrete pores which hardens the surface and renders it dustproof. The surface durability, abrasion, stain and chemical resistance is also improved too. Adotuf is Non-flammable

ADOTUF will extend the life of both old and new floors and surfaces. It not only considerably reduces floor maintenance and subsequent cleaning costs, but also reduces dust hazard to both health and machinery. ADOTUF is suitable for all cement-bound floors, including concrete, terrazzo, limestone in both commercial and industrial settings. For coloured concretes we recommend that small indiscreet areas be tested prior to treating the whole floor.

ADOTUF will not be effective in binding together surfaces where the cement paste is of such poor quality that its surface is in a state of disintegration.

### Advantages

- Fully Dustproofs and densifies cementitious based surfaces
- Low odour and VOC free.
- Non-Flammable
- Easy to clean & maintain, no waxing necessary
- Excellent durability.
- Long lasting and UV stable—will not yellow, flake or discolour
- Improved chemical & stain resistance (oils & greases)
- Resistant to surface whitening/efflorescence on exposure to atmosphere

### Application

#### Surface Preparation

Cement bound floors must be sound, clean, dry and free from oils, grease, fats, etc. New floors will require at least 7- 10 days to thoroughly dry out before treatment and have sufficient strength to withstand the application operation. Pores in the surface should be opened up by wire-brushing. Remove dust and loose particles with a soft broom. Test surface absorbency with a light water spray. If surfaces designated for treatment do not wet uniformly then the surface must be chemically or mechanically cleaned before commencing treatment.

#### Application

Use as supplied onto standard surfaces. Apply uniformly onto floor surface at a rate of 4-6m<sup>2</sup> per litre using a low pressure sprayer at approx 30-40cm from the surface. Using a soft cloth, soft bristle broom or roller work well into the surface apply evenly over floor or surface to be treated. Avoid formation of puddles. Leave for 30-60 minutes—the material will begin to gel on the surface will become more slippery. Wet the surface with water and rework using a soft broom or roller. If after a further 20-30minutes there is any material remaining on the surface unabsorbed, then the surface should be rinsed/washed and squeegeed away. Do not allow the material to dry on the surface as a white crystalline deposit will be left on the surface which is difficult to remove. A second application may be required for more porous surfaces. Repeat the process as above and squeegee away any excess material remaining after one hour.

If the surface has been polished or is dense, then Adotuf can be diluted 1:1 with water to help the silicate solution penetrate and densify the concrete at surface level and just beneath. Follow the same procedure as above for application and removal.

Adotuf is an alkaline solution, with a pH around 13.0 – 13.5 – therefore it is very alkaline and can react with some metal surfaces that it comes in contact with and be corrosive and as such suitable precautions should be introduced prior to application. Adotuf/ sodium metasilicate pentahydrate solution should not come into contact with strong oxidising agents or strong acids. It is incompatible with the following metals: zinc, tin, aluminium, copper and their alloys – permanent damage to the metals can occur if the solution is not quickly cleaned off. It is compatible with stainless steel.

Adotuf is a highly alkaline solution protective eyewear, gloves and clothing should be worn when handling and applying

Apply between temperatures above 5° and below 25°C. Do not apply in direct sunlight or onto sun-heated surfaces.

Outdoors: Do not apply if raining or if likelihood of rain exists.

The material should not come into contact with glass or with painted or polished surfaces or any other surface not going to be densified. Any contact by splashes should be washed off immediately with water to avoid the formation of white silicate spots on the surface.

## Coverage

As covering capacity is dependent upon floor porosity it is not possible to quote a specific figure. However, experience has shown that an average coverage of 4-6m<sup>2</sup> per litre per coat may be expected.

All application equipment should be cleaned with fresh water immediately upon completion of application. Immediately wash off over spray from glass, aluminium, polished or other surfaces with fresh water.

## Storage

ADOTUF should be protected from frost. Containers must be kept sealed after use. The product may require mild agitation before use if stored for more than 6 months.

## Shelf Life

12 months in sealed containers, ideally use within 3 months of opening. Roll or agitate containers after prolonged storage, prior to use.

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ADOTUF is manufactured by Adomast Manufacturing Ltd and shall be applied strictly in accordance with the manufacturer's instructions. For specific advice regarding any aspect of this product, please consult our Technical Department

## Health and Safety

During application avoid contact with eyes and skin. In the event of eye contact irrigate immediately with copious quantities of water for 15 minutes and then seek medical attention immediately. In the event of skin contact, wash with soap and water and seek medical attention immediately. Ingestion - drink large quantities of water. Do NOT induce vomiting. Seek medical attention immediately

Wear protective eyewear and gloves when handling and using.

See Safety Data Sheet for further information.