

# Protectosil® 200N

# 100% Isobutylalkoxysilane water repellent for mineral based building materials

# PRODUCT DESCRIPTION

Protectosil 200 N is an ultrapure, colorless, solvent-free liquid water repellent based on Isobutylalkoxysilane, intended for the external waterproofing of mineral building materials. The ultrapure material is guaranteed to not leave a residue on non-porous substrates, such as glass or aluminum window framing. Protectosil 200 N chemically bonds with silaceous materials to form a permanent attachment of the water repellent molecule. Creates a deep hydrophobic layer which prevents water and waterborne contaminants from entering the substrate and causing premature detionation. Protectosil 200 N may be used as a concentrate or it can be diluted to manufacture other products and formulations.

## **TECHNICAL DATA**

Properties and test methods	Value	Unit	Method
Color	water white		
Solvent	none		
Active Content	100	%	
Flash Point	145.4	°F	
Density	7.3	lbs/gal	
VOC(Pure)	390	g/L	
Viscosity	0.95	mPa.s	

# REGISTRATION

# Protectosil® 200N

EINECS/ELINCS (EU)	Yes
AICS(Australia)	Yes
DSL/NDSL (Canada)	Yes
TSCA (USA)	Yes
ENCS (Japan)	Yes
ECL (Korea)	Yes

# **PROPERTIES AND USE**

#### Recommendations for use

As a water repellent for mineral building materials, especially substrates with higher porosity such as:

- concrete (cast-in-place and precast)
- brick
- Natural Stone(non-calcareous)

### **Product Characteristics**

- solvent-free, colorless material
- 100% moisture vapor transmission
- No masking of windows required
- effective on micro cracks up to 0.3 mm
- Excellent resistance to chloride ion ingress
- deep penetration into substrate
- resistant to alkali
- mitigation of AAR and ASR detioration
- meets NCHRP, ASTM and AASHTO standards

# Formulation Recommendation

**Protectosil** 200 N can also be applied in a diluted formulation. Dilution can be done either in the manufacturing facility or in the field. There is no potlife issues after the solvent is added. We recommend using a mimimum 55% concentration of the active ingredient in anhydrous (absolute) ethanol in order to meet EPA guidelines for VOC regulations. Lower concentrations of active material can be used if exempt solvents are incorporated in the formulation.

When diluting, combine the solvent and **Protectosil** 200 N to a clean vessel. After mixing briefly the solution is ready for use. The diluted solution is suitable for treating all absorbent mineral building materials, such as, but not limited to concrete(precast and cast-in-place), and some natural stone.

#### Directions for use

The substrates to be treated should be air-dry and clean in order to ensure deep penetration of the active ingredient. During application the outside temperature and the temperature of the substrate should be within the range of 20 °F to 100 °F. The material should not be applied if there is strong wind or if it is raining. The material must not come into contact with water either before or during use.

**Protectosil** 200 N should be applied using low-pressure (15 to 25 psi) pumping equipment with a wet fan type spraynozzle. Alternate methods include using either a power roller with a 1" nap or a brush.

On vertical surfaces, apply the **Protectosil** 200 N in a flooding application from the bottom up, so the material runs down 6 to 8 inches below the spray pattern. Coverage rates on vertical surfaces depend on the type of substrate to be treated. Coverage rates on horizontal concrete surfaces are between 100 and 350 ft<sup>2</sup>/gal.

All equipment and containers must be clean and dry. After use, they can be cleaned with any organic solvent (mineral spirits, denatured alcohol or thinners). Glass, wood, and metal are not attacked by **Protectosil** 200 N, therefore it is not required to mask these surfaces off prior to application. It is recommended that windows and other non-porous substrates that will come in contact with be clean to guarantee no residue is left on them after application of **Protectosil** 200 N.

Since it is frequently unknown whether the substrate has been previously treated, a test should always be performed on a small area to make sure that no undesired results occur. Plants in the vicinity of the substrate to be treated are to be protected against contact with the waterproofing agent.

**Protectosil** 200 N is a combustible liquid and should be kept away from heat, sparks, open flame and other sources of ignition. **Protectosil** 200 N containers should be kept closed when not in use and should be stored at temperatures between 0°F (-18°C) and 120°F (50°C), away from rain and standing water. When working in an enclosed area, an air respirator should be used. Please refer to the material safety data sheet for more detailed information.

#### AVAILABILITY

**Protectosil** 200 N is available in 5-gallon pails and 55-gallon drums. Shipped F.O.B. throughout the United States and Canada. Contact your local Protectosil representative or your regional manager for specific cost information. You can obtain their contact information on our website, www.protectosil.com, or by calling us at 1 (800) 828-0019

# **TECHNICAL SERVICE**

Technical service engineers and scientists are available to answer questions about product performance, application methods and compatibility with other building materials. You can speak to one of our engineers or scientists directly by calling our toll-free number, 1 (800) 828-0919, and selecting option 1.

#### MANUFACTURER

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