

## Product description

nC Protect - 4400 Food Grade Sealant is a transparent liquid based on sol-gel nanotechnology. Permanently protects against wear, absorption and contamination. It restores limed and bleached colors and is UV resistant. Suitable for all materials including polyester, UHMWPE (Dyneema, Spectra),(U)HDPE, PMMA, kevlar, metals and natural stone. The liquid chemically bonds to materials. It forms a matrix in the material. nC Protect - 4400 becomes a permanent highly flexible ultra-thin, glass-like finish and protection against dirt. This makes this finish very suitable for protecting against negative chemical and environmental influences. Ready to use for sponge, roller or cloth application.

## Advantages

- Chemically bonds to materials
- Makes surfaces dirt-repellent
- Prevents minor surface scratches
- Protects surface against chemicals and chalking, restores faded colours
- Resistant to temperatures -50 °C to +730 °C
- Low consumption 30 to 60m<sup>2</sup> per liter
- Ultra thin layer of < 25 mμ, fully transparent
- Contains no metals
- Lifespan 5 to >10 years depending on use

## Suitable for

- All surfaces including HDPE, natural stone, glass, metal
- Glazed tiles
- Dusty areas, damp areas, areas

## Characteristics

Liquid <0.900 mPas  
Color transparent  
Smell ammonia  
Solids 10%

Density 0.92g/cm<sup>3</sup>/20°C ( DIN 53217 )  
pH value 6  
Contains no metals, no fluorine

## Logistics

Store between 5°C and 25°C  
Store for a maximum of 24 months in tightly closed packaging  
Available in packs of 125 ml, 250 ml, 1 l, 5 l  
UN number 2924, flammable  
Suitable for air transport



## Preparations

- Ready-to-use product, do not dilute
- Clean the surface of dirt, grease, poorly adhering materials
- Apply only to dry materials
- Do not apply in humid or humid areas
- Avoid moisture during application.



## application

- This product is intended for use by professionals.
- Product is ready to use. DO NOT USE THINNER!
- Use tight-fitting safety goggles.
- Provide adequate ventilation.
- Protect hands and skin from exposure with gloves and appropriate clothing. Gloves must be resistant to solvents (butyl rubber) and >0.5 mm thick and comply with standard EN 374 of Directive EU 89/686/EEC.
- Do not eat, drink or smoke during application.
- Substrate must be free of grease, dirt, dust and water or damp.
- The ambient temperature is ideally between 20°C - 40°C, surface temperature between 10°C - 50°C.
- Do not apply when humidity exceeds 80%.
- Avoid direct sunlight during application if the ambient temperature is above 15°C.
- Let C Protect - 4400 not come into contact with water during application or during curing time (first 12 hours). Contact with water during application will result in nC Protect - 4400 reacting prematurely with H<sub>2</sub>O rather than with the surface, interfering with the long-term adhesion of the coating.
- The layer thickness can vary from 5 – 20 µm, depending on the application conditions.
- Use a cloth, roller or sponge to apply the coating.
- The dosage varies from 15 ml to 33 ml per m<sup>2</sup>
- nC Protect - 4400 is very thin and liquid, be careful not to use too much product!
- Keep the uncured product away from flames, all sources of ignition and moisture.
- nC Protect - 4400 must be applied in one go. Due to the repellent properties of the coating, stains, open spots or other defects can be removed within 10 minutes after the first application. After 10 minutes, the coating will begin to repel any layer that is applied, including paint, solvent or other liquids.
- Get dry at ambient temperatures above 10° C : 2 to 3 hours.
- Curing times, after which the coating can be fully commissioned:
  - Ambient temperatures between 10° C and 20° C: 24 hours;
  - Heated to 60°C for 15 minutes: 3 hours;
  - Heated to 80°C for 15 minutes: 2 hours;
  - Heated to 180°C for 15 minutes: 1 hour;
- Full strength is reached after 3 to 5 days.
- Immediately clean any accidental coated or dripping surfaces with (butyl)acetone or turpentine.
- Solvent cleaning can be followed by washing with soapy water.
- Cured material cannot be removed with solvent.
- Proper cleaning of the equipment is essential.
- Storage 2 years at <25°C.