NAUS FireStop FSP Product Data Sheet

Fire Retarded Polymer Coating

DESCRIPTION

*NAUS FireStop FSP i*s a fire retarded, two component, rapid curing modified polyurea designed for application on wood, concrete, fibreglass, steel or other substrates where a high level of fire retardance is required. This is a 100% solids, flexible, aromatic, two component spray polyurethane polyurea that can be applied to suitably prepared surfaces. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature, allowing application in most temperatures. *NAUS FireStop FSP* is used to prevent or control flame spread and substrate damage during a fire. The product can be specified as a top coat in conjunction with other NAUS products in monolithic compositions.

NAUS FireStop FSP is applied by Nukote Australia Pty Ltd using specialised application equipment and processes.

FEATURES

- 100% Solids with zero VOC
- Fast reactivity and cure time resulting in almost immediate return-to-service time
- Can be applied in temperatures from -30ºC to +100ºC
- Performs in constant temperatures from -30ºc to +120ºC
- Retains physical properties at -30ºC to +120ºC
- Low flame spread and smoke developed properties
- Moderate elongation properties
- Seamless, resilient, flexible and tough
- Good corrosion protection
- Impact, tear and abrasion resistant

TYPICAL USES:

- Utility poles
- Bund lining
- Top coat over standard polyurea
- Chemical processing plants
- Mining
- Oil & Gas, petroleum industries

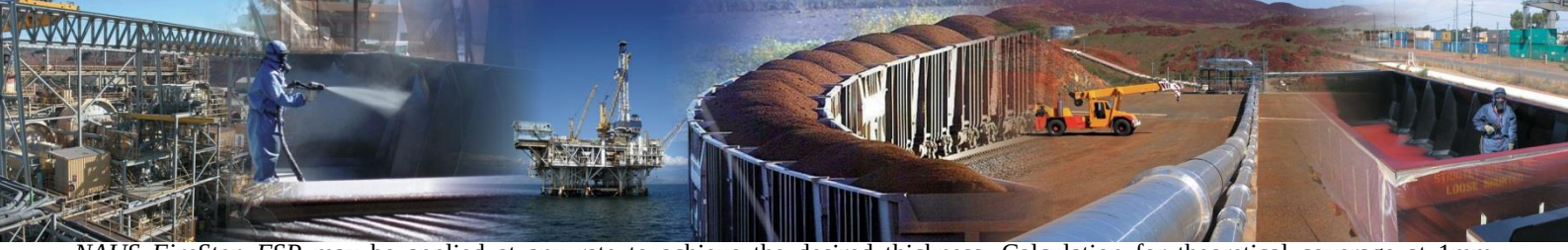
COLORS:

Standard green

PACKAGING:

NAUS FireStop FSP is available in 380 litre sets shipped in metal drums of 190 litres each of Side A and Side B or 38 litre kits shipped in plastic pails of 19 litres of side A and 19 litres of side B, or 2090 litre tote sets shipped in hardened plastic-metal reinforced UN approved totes of 1045 litres each of side A and side B.

COVERAGE:



NAUS FireStop FSP may be applied at any rate to achieve the desired thickness. Calculation for theoretical coverage at 1mm thickness is 1 litre/m^2 on smooth surfaces.

TECHNICAL DATA (All values @25 °C)	
Solids by volume	100%
Volatile Organic Compounds	0 gm/ lit
Theoretical coverage@ 1mm	1m^2/ lit
Specific Gravity (kg/ litre)	A+ B = 1.25
Viscosity at 70°C in cps (ASTM D 412)	A-200, B 125
Shelf life @ 25°C	6 Months
Tensile strength (ASTM D 412 C)	8.5 MPa
Elongation (ASTM D 412)	90 %
Tear strength (Die C ASTM 624) (kN/m)	45
Fire Rating	Class 1
Flash point Pensky Martin	>93°C
Service temperature (Dry)	-30°C to 120°C
ENA Pole Fire Test Rating - Excellent	
PROCESSING PROPERTIES (Under standard lab conditions)	
Mix Ratio V/V	1:1
Gel time	3 to 5 seconds
Tack free time (DFT & Temperature dependant)	10 Seconds
Recoat time	0 – 12 hours
Post cure time	24 hours
(The above properties and values are dependent on equipment, equipment settings, spray gun, chamber, tipsize, temperature, pressure and related parameters and slight variations are possible). The above values are as per NCSI Standard lab practices & methodology)	

SURFACE PREPARATION:

Note that these are general recommendations. Please review your specific project with Nukote Australia technicians

For optimum performance and adhesion, all surfaces must be free of oil, grease, dirt and other contaminants.

Utility Poles: Poles should have a moisture level less than 20% and be dry and free of surface dirt and protruding splinters. Splits larger than 3mm should be filled or taped to control material usage.

Carbon Steel: Remove surface contamination, e.g. oil, grease, chemicals, surface chlorides etc. Abrasive blast to SA 2 ½ surface finish and 65 micron minimum surface profile. Vaccum, solvent wipe or blow down the surface before applying *NAUS FireStop FSP*.

Concrete: Concrete should be allowed to cure for 30 days. Abrasive sweep blast or high pressure water blast to remove surface laitance, contamination and loose substrate and create an anchor profile of 300 to 500 microns. Vacuum or blow down/brush to remove dust. Repair and tape cracks as required. Apply suitable primer.

MIXING:

NAUS FireStop FSP must not be diluted under any circumstance. Thoroughly mix *NAUS FireStop* Part B material with a heavy duty air driven blade type mixer until a homogeneous mixture and color is obtained. Heater bands may be required to aid with dispersion of the solid elements in the Part B resin.

APPLICATION:

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Part-B material should be preconditioned at 40°C before application.

Part B should be continuously agitated before and during application. Agitate, with heating if required, for at least 1 hour prior to application using a heavy duty blade type agitator. Remove filters from B side Y filter and Fusion gun.

Recommended DFTs are a function of the project, please contact a Nukote Australia technician. On horizontal surface applications, a texture “stipple” coat can be applied for non-skid purposes, after reaching desired film thickness.

EQUIPMENT CLEAN UP:

Cured product may be disposed of without any restrictions. The uncured Isocyanate and resin portions should be mixed together and disposed of in a normal manner. “drip-free” containers should be disposed of according to local environmental laws and ordinances.

STORAGE:

Twelve months in factory delivered, unopened drums. Keep away from extreme heat, freezing, and moisture. The use of drum heaters is encouraged to reduce material viscosity at low temperatures. Adding a nitrogen blanket is strongly recommended for use on the Part ‘A’ component for storage after opening.

WARNING:

This product contains Isocyanate and curatives. Please read the product MSDS’s.