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TECHNICAL DATA SHEET

FEDLINE XTREME 301 POLYUREA

New-generation hybrid polyurea spray system.

Description

FEDLINE XTREME 301 POLYUREA is a hybrid polyurea lining system that is used to produce seamless coatings used for waterproofing and industrial applications. **FEDLINE XTREME 301 POLYUREA** is solvent-free, resulting in a lining that exhibits high strength and abrasion properties. Lining thicknesses of up to 5mm per application can be achieved.

Specifications

Table 1: Cured system properties

Property	Value	Standard
Hardness (Shore A)	95 ± 2	ISO 7619-1
Elongation at break (%)	880	ISO 6259-3
Tensile strength (MPa)	18	ISO 6259-1
Abrasion (mg)	20	ASTM D5963
Tear resistance (kN/m)	50	ASTM D1004

Table 2: Reaction properties

Property (unit)	Poly	ISO
Viscosity @ 25 °C (mPa.s)	650 ± 150	750 ± 150
Density (kg/l)	1.03	1.13
Mix ratio (by volume)	100	100
Processing temperature (°C)	65	65
Gel time (seconds)	6	
Tack free time (seconds)	8	
Available colours	Grey or Black	

PRINCIPLE USES

FedLine Xtreme 301 Polyurea can be sprayed onto a variety of substrates to provide an abrasion resistant, impact resistant, waterproof, and corrosion resistant, seamless coating, which is also resistant to many corrosion causing chemicals.

Since it is a 100% volume solids spray system & there are no solvents to evaporate, several significant cost and time saving advantages accumulate to the application.

APPLICATIONS

- FedLine Xtreme 301 is used for coating & lining of separation trays, pipe lines, hoppers, acid tanks, settling tanks, slurry tanks, primary & secondary containment areas, silos, roofs, gutters, agitating tanks, floors, foundations, chutes, conveyors, transporters, containment units, hygienic areas, waterproofing etc.
- Over-coating for insulation foams e.g. urethanes, polystyrene, polyethylene, etc.
- Protective industrial strength heavy-duty linings for load bins of vehicles i.e. pick-up trucks, panel vans, trailers, trucks, LDV's etc.

CHEMICAL RESISTANCE

FedLine Xtreme 301 is resistant to a variety of mild chemicals, acids & alkalis.

Please contact Federal Industrial Linings for advice on specific chemical product resistance.

ADVANTAGES

Good inter-laminar adhesion.

No time lag between coats.

No solvent entrapment to cause delamination or porosity.

Very short tack-free times.

No flammable or toxic solvent hazards.

No solvent attack on sensitive surfaces e.g. polystyrene.

Sprayable at temperatures of 10°C and above.

Good adhesion to various substrates.

APPLICATION

Apply to the desired thickness using approved high or low pressure PU/R spray equipment to a cleaned and prepared surface. On concrete surfaces **FedPrime MC808 Epoxy Primer** must be used. Any porous or absorbed areas still showing after priming applications, should be primed again.

On stainless steel, aluminium, fibreglass, wood, rubber & plastic surfaces **FedPrime XP 308 PU Primer** must be used. For any specialised surfaces or applications please contact Federal Industrial Linings.

Steel substrates should be grit / sandblasted to Sa 2½ (ISO 8501-1) prior to application.

Should grit / sandblasting not be possible, a surface tolerant epoxy primer (available from Federal Industrial) should be used.

CLEANING

Clean hands and skin immediately after use with industrial hand cleaner.

Clean tools and equipment immediately after use with Acetone or MEK.

LIMITATIONS

- Working temperatures between 10 and 40°C.
- Will not accommodate constant heat above 70°C
- Avoid excessive application.
- Avoid contact with skin.
- Do not release into sewer or surface water.

STORAGE AND STABILITY

Shelf life is 9 months when stored in unopened containers in a cool & dry place.

Failure to do so will result in a reduction of shelf life.

Raw materials are sensitive to moisture & humidity – always ensure containers are sealed tight.

SAFETY AND HANDLING

Use only with adequate ventilation. Avoid breathing of vapours and prolonged or repeated skin contact.

Protective clothing and gloves should be worn when handling this product.

All sources of ignition should be removed.

The safety procedures applicable to the handling of polyurethanes/polyureas and chemical materials should be read, understood and rigidly adhered to.

Although FedLine Xtreme 301 Polyurea is relatively non-toxic, it is recommended that the normal precautions in dealing with conventional PUR resin systems be adhered to.

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