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# TECHNICAL DATA SHEET

### **FEDLINE 101 POLYURETHANE**

### **DESCRIPTION**

FedLine 101 Elastomeric Polyurethane is a 100% solids, solvent free, flexible, elastomeric, 90 degrees "Shore A" lining system. It is manufactured by spray application using specialised low pressure, low temperature 1:1 ratio Polyurethane dispensing equipment.

### **PRINCIPLE USES**

FedLine 101 Polyurethane 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 101 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 linings for load bins of vehicles i.e. pick-up trucks, panel vans, trailers, trucks, LDV's etc.

### CHEMICAL RESISTANCE

FedLine 101 is resistant to a variety of mild chemicals, acids & alkalis. Please contact Federal Industrial Linings for advice on specific chemical product resistance.

# **PERFORMANCE DATA**

# **Description** Results

Hardness90° Shore AMix Ratio1 : 1 (by volume)

 Touch Dry (Hours) @ 25°C
 0.1 hrs

 Over Coating Time (Hours) @ 25°C
 0.1 – 8 hrs

 Hard Dry (Hours) @ 25°C
 0.5 hrs

 Walk on Dry (Hours) @ 25°C
 1 hr

 Full Cure @ 25°C
 10 hrs

**Kit Size** 2 x 25 kg kits

Volume Solids 100%

**Theoretical Coverage (m²)** 1.1kg yields 1mm thickness p/m² (Excludes wastage)

**Application Temperature**  $10-40^{\circ}\text{C}$ 

**Shelf Life** 12 months in unopened containers

Tensile Strength21 MpaElongation at break350%Tear Strength20 kN/mDensity1.1 g/mlCFC's & VOC'sNone

## **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 low pressure PU spray equipment, (available from Federal Industrial) 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 XT400 PU Primer** must be used. For any specialised surfaces or applications please contact Federal Industrial Linings.

Steel substrates should be grit / sandblasted to minimum spec SA2.5 prior to application – no primer required.

Should grit / sandblasting not be possible, a surface tolerant primer (available from Federal Industrial) should be used. For load bins to delivery vehicles, chemical preparation is sufficient – please contact Federal Industrial for advice.

### **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 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 12 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 and chemical materials should be read, understood and rigidly adhered to.

Although FedLine 101 Polyurethane is relatively non-toxic, it is recommended that the normal precautions in dealing with conventional PU resin systems be adhered to.

The information contained in this data sheet is to the best of our knowledge true and correct, but any recommendations or suggestions that may be made are without guarantee as the conditions of use are beyond our control. Federal Industrial Linings specifically records that no guarantees and/or warranties are hereby made or given either expressed or implied.