within 24hours (25 °C)



### **SUPERTEX PU-100**

SUPERTEX PU-100 is a high performanced, sprayed, plural-component pure polyurea elastomer. Polyurea coatings is very fast and not sensitivity to humidity and low temperature. This system is based on MDI prepolymer with NCO content, amine-terminated polyether resin and amine chain extenders. It provides a flexible, tough, resilient monolithic membrane with good water and chemical resistance.

- The limitations are in the ability of the application equipment.
- 100% solids type, solvent free and non-toxic.
- Fast gel and tack-free times set making applicable on the inclined or vertical surface without sagging and short down
- Applicable at low temperature and Insensitivity to atmosphere and substrate moisture.
- Excellent physical properties such as chemical, impact, abrasion, cold, heat, water resistance and durability and UV resistance.
- Non catalyst.
- High productivity per employee.

### RECOMMENDED USE

**CHARACTERISTICS** 

- Waterproof and anti-corrosive coating for marine structure, vessel deck, chemical tank, swimming pool.
- Floor coating for office, hospital, school and library.
- Floor coating for anti-tremble and anti-noise in a mill or warehouse
- Reinforcement coating for the incline of road and waterproof and anti-corrosive coating for underground cave.
- Water proof and anti-corrosive coating for buried concrete structure, sewerage pipe and manhole, etc.
- Variety of waterproofing materials for buildings.

### PHYSICAL PROPERTIES

part A: yellowish liquid - Appearance part B: various colors

- Non-volatile content(%) part A: 100 part B: 100 - Specific gravity(25/4°C) part A:  $1.14 \pm 0.05$ 

part B :  $1.03 \pm 0.05$ 

- Viscosity(cps/25°C) part A :  $600 \pm 200$ part B :  $700 \pm 200$ 

- Mixing ratio(volume) 1:1

- Theoretical coverage  $1.1~\mathrm{kg/m^2} \times \mathrm{mm}$ 

- Gel time(sec/25 °C)  $10 \pm 2$ - Tack free time(min/25°C) min. 1 - Post cure(hour/25°C) 12 80~90 - Hardness(Shore A) - Elongation(%)  $450 \pm 100$ - Tensile strength(N/cm<sup>2</sup>) over 980 - Tear strength(N/cm) over 490

polyurethane primer - Primer (Primer SP-200) SUPERTEX SL-100 or - Top coat

**HI-URETHANE topcoat #2000** 

### PACKING UNIT

- Recoating interval

- Part A : 190  $\ell$  /Drum, Part B : 190  $\ell$  /Drum

- Could be packed on request.

#### **STORAGE**

- Store it indoor at room temperature.

Storage temperature : 15~30 °C

- Humidity: 0~70% (unopened condition)

- Must keep sealed remained product once opened.

### SHELF LIFE

- 6 months in unopened containers under normal warehouse conditions.

### **PRECAUTIONS**

- Keep adequate ventilation during the application.
- Store it indoor and cool place and keep away from ignition.
- Use masks, gloves, or other protector during the application.
- Store the remaining materials quite sealed after use.
- Do not exposure to the moisture.
- Keep away from children during coating and storing.
- In case of ingestion or skin contact, administrate first aid according to notice on container or Material Safety Data Sheet(MSDS), and see the doctor immediately.
- Do not use other purpose except original recommended use.

### SUPERTEX PU-100 is a Jeong Seok's trade mark

IMPORTANT The information contained in this publication is, to the best of our knowledge, true and accurate, but any recommendations or suggestions which may be made are without guarantee, since the conditions of use are beyond our control.

This document contains purchasing information as well as a construction manual based on international standards ISO/IEC GUIDE 14(product and service information for customers) and ISO/IEC GUIDE 37(product instruction manual for customers)



### **SUPERTEX PU-100**

### LIMITS

This Sheet covers with the working with SUPERTEX PU-100.

This Sheet is a kind of standard of operations, so if there a specification for detail work and there are some difference in the two documents, it's nice to work according to the specification.

### RECOMMENDED EQUIPMENT SETTINGS

- Application tools
  - Standard 1:1 ratio, heated, plural component equipment(minimum 1500psi) dynamic pressure with heating capabilities to 79°C will adequately spray this product on the same GRACO E-XP2
  - · Pre-heater temperature should at 70~75°C
  - Hose temperature should be at 60~70°C a hose thermometer inserted under the insulation near the gun should read a minimum of 60~70°C
  - · Spray Gun(Fusion MP or such as Fusion MP)
  - · Air compressor (inclusive of dry air)

#### SURFACE PREPARATION

- Importance of surface treatment: There are much alkaline dust on the concrete surface, and it make poor adhesion with polyurethane and surface. So it must be removed for strong film and excellent adhesion.
- Cure the concreted surface sufficiently to remove the alkali of the surface and keep the moisture content within 8% max.

Temperature ( $^{\circ}$ C)	Need to Curing (day)
24	28 Min.
21	30 Min.
10	40 Min.
7	60 Min.

- Clean the surface with acid , sandblast or grinding if you need.
- It should be cured completely when the appropriate primer or equivalent material was applied.
- Remove dust, sand, moisture and oil on the surface.
- In case that the surface to be applied is damp, dry fully and apply.

### DIRECTIONS FOR WORK

- 1. Direction for Primer SP-200 coating
- Check the cleaned well surface.
- If there are some water it must be dried and must be not dusty.
- Then apply to cleaned surface with proper primer, Primer SP-200 or SP-100 or Hi-Urethane Primer
- Apply with the SUPERTEX PU-100 after curing the primer.
  It may be one to twelve hours after primer coating.
- See the DIRECTIONS FOR USE of Hi-Urethane Primer or Primer SP-200 for the details.

### 2. Direction for **SUPERTEX PU-100**

- Check the curing of Primer coating and then apply the SUPERTEX PU-100.
- You can only use plural component equipment(minimum 1500psi) dynamic pressure with heating capabilities to 79°C will adequately spray this product on the same GRACO E-XP2.
- Connect fluid supply hoses to outlet hose connections, connect main supply air hose.
- The unit does checking for pressure imbalance(more than 200psi)
- Fast gel and tack-free times set making applicable on the inclined or vertical surface without sagging and short down
- If material temperature is low, the fluids must be circulated from the pump and rise in temperature depending on manufacturer.
- The limitations are in the ability of the application equipment to provide adequate material pressure and heat..
- In that time, you apply with 0.1~0.3mm of first coating. If you need more than 2mm thickness, apply within 1mm per one time until to get aiming thickness.
- When the humidity is higher than 85%, you might as don't use as possible.
- This product is for professional use only.

# 3. Direction for top-coat SUPERTEX SL-100 or Hi-Urethane TOP COAT

- Check the curing of intermediate coating and then apply the **SUPERTEX SL-100** or Hi-Urethane TOP COAT.
- Repair the intermediate if there are some problems as curing problems or coming undone from the floor.
- **SUPERTEX SL-100** is sprayed top-coat. It use plural component equipment (minimum 1500psi) dynamic pressure with heating capabilities to 79°C will adequately spray this product on the same GRACO E-XP2.
- Mix well the Hi-Urethane TOP COAT part A and part B.
- You don't need electric agitator because the viscosity of top coat is very low.
- Coat the surface with mixed well Hi-Urethane TOP COAT with paint roller, sprayer or other instruments.
- It could be used thinner when it need to adjust the fluidity for easy control.
- Do not use the alcohols as thinner, the alcohols react with the Hi-Urethane TOP COAT and became poor film.
- If you use sprayer, clean well the hose and other equipment of sprayer after the operations to prevent curing the Hi-Urethane TOP COAT in the equipment.
- Keep prevent passage in 24~72 hours after applying and then permit when it fully cured.
- See the DIRECTIONS FOR USE of **SUPERTEX SL-100** and Hi-Urethane TOP COAT for the details

### **PRECAUTIONS**

- Keep adequate ventilation during the application.
- Store it indoor and cool place and keep away from ignition.
- Once opened, containers should be resealed immediately after removal of the product.
- Do not exposure to the moisture.
- Keep away from children during coating and storing.
- Take a gas mask and put on the other personal protector in



## **SUPERTEX PU-100**

the applying.

- Must use suitable thinner, otherwise you must get failure coating film.
- Products of this type can be expected to be eye and skin irritants and have the potential to cause sensitization or other allergic responses.
- Appropriate precautions should be taken to avoid eye and skin contact and to avoid inhalation of the aerosols or vapors.
- Consult the relevant Material Safety Data Sheet for appropriate handling procedures and protective equipment prior to using this or any other material referred to in this bulletin.
- See Material Safety Data Sheet for emergency and first aid procedures.
- Must not use this product for other purposes except for it's own use.

SUPERTEX PU-100, Primer SP-200, SUPERTEX SL-100, Hi-Urethane TOP COAT is a Jeong Seok's trade mark

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