

CODE: PU-845

PRODUCT NAME:

## Acrylic-Urethane Intermediate Coating

DESCRIPTION:

PU-845 is aliphatic polyurethane with performance, which has excellent resistance to violet exposure as well as chemical, industrial and marine environments. PU-845 forms an impact and abrasion resistant coating with excellent color retention, non-yellowing and non-chalking properties, where an attractive appearance and a wide range of corrosion resistance is required for chemical plants, pulp and paper mills, petroleum refineries, offshore platforms, marine equipment, ship topsides and other equipment. PU-845 is also recommended to use as a tie coats over epoxy primers.

TECHNICAL DATA:

Binder	Acrylic-Urethane
Pigment	Chemical and UV resistant pigment
Finish (glass)	Semi glass (40±5)(60°)
Shade	RAL Colors
Specific gravity after mixing	1.3 ± 0.1 Kg/Lit
Volume solids	43 ± 2 %
Flash point	26 °C
Typical dry film thickness	30-60 Microns per one coat
Number of coat	One
Mixing ratio by weight	Base : 100 parts Hardener : 16 parts
Substrate	Primed steel or concrete, Aluminum, Galvanized
Application method	Conventional or airless spray, brush, roller
Thinner / Cleaner	T-850
Weight of added thinner	Maximum 10%
Induction Time at 20 c	30 min
Theoretical spreading rate (at 60 microns)	7.17 M <sup>2</sup> /Lit
Packing	Base : 25 kg Hardener: 4 kg
Shelf life	12 Months

Under License



Approved by



## Drying Time

Temp	Touch dry	Hard dry	Overcoating		Full cure
			Min	Max	
15°C	7 hours	24 hours	15 hours	Not limited	10 days
25°C	3 hours	18 hours	12 hours	Not limited	7 days
40°C	2 hours	10 hours	4 hours	Not limited	3 days

**Note:** Drying times are dependent on applied film thickness; all data in this catalogue are reported at recommended DFT.

## Pot life

Temp. of paint	15°C	25°C	40°C
Pot life	10 hours	7 hours	5 hours

## SURFACE PREPARATION

All Surfaces to be coated should be clean, dry and free from contamination. Prior to Paint application all surfaces should be assessed and treated in accordance with ISO 8504:1992.

### Primed Surfaces

PU-845 should always be applied over a recommended anti-corrosive coating scheme.

The primer surface should be dry and free from all contamination, and PU-845 must be applied within the overcoating intervals specified.

Areas of breakdown, damage etc., should be prepared to the specified standard (e.g. ISO 8501-1:1988) or SSPC-SP6, Abrasive, or SSPC-SP11, power too cleaning) and patch primed prior to the application of PU-845.



Approved by





Approved by



**Concrete, precast block work etc**

PU-845 is suitable for application to concrete. For the first coat it is recommended that

PU-845 is thinned 15-20 %by T-850 in order to provide good penetration into the concrete substrates.

Concrete should be cured for a minimum of 28 days prior to coating. The moisture content of the concrete should be below 6%. All surfaces should be clean, dry and free from curing compounds, release agents, trowelling compounds, surface hardener, efflorescence, grease, oil, dirt, old coatings and loose or disintegrating concrete. All poured and precast concrete must also be sweep blasted (preferred) or acid etched to remove laitance.

Surface preparation shall not take place in the following conditions:

- A) At temperature below 5 ° C
- B) When the relative humidity greater than 85%
- C) When the metal surface temperature is less than 3°C above the dew point
- D) Outside day light hours on exterior locations

**Application Method**

Material is supplied in two containers as a unit. Always mix a complete unit in the proportion supplied. Once the unit has been mixed it must be used within the working Pot life specified.

- 1-Agitate part A with a power agitator.
- 2-Combined entire contents of curing agent (part B) With Base (Part A) and mix thoroughly with power agitator.

(Stir during application to maintain uniformity of material.)

**Application Equipments**

Air less Spray	Tip range 0.019-0.021 inch output pressure at spray tip not less than 141 Bar (2000 psi)
Air Spray	Nozzle orifice 1.8-2mm Nozzle pressure: 2-4 Bar (29-58 psi )
Brush	Typically 30 mic can be achieved.
Roller	Typically 30 mic can be achieved.

**Note:** The components of polyurethane are reactive with moisture. Keep containers dry and tightly sealed to avoid moisture contamination.

## ENVIRONMENTAL CONDITIONS:

- To prevent moisture condensation during application, surface temperature must be at least 3 °C above dew point.
- Never apply coatings under reverse environmental condition.
- In hot climate, material temperature should be 20 to 25 °C prior to mixing; otherwise pot life becomes very short.
- For satisfactory cure, air and surface temperature must be above 10°C
- Paint shall not be applied when wind speed is in excess of 7 m/s

Air temperature	10 to 40 °C
Surface temperature	10 to 50 °C
Material temperature	10 to 30 °C
Relative humidity	Max80 %

## HEALTH AND SAFETY:

This product is Flammable. Keep away from heat and open flame .Keep container closed .Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

- 1-Circulate adequate fresh air continuously during application and drying.
- 2-Use fresh air masks and explosion proof equipment.
- 3- Prohibit all flames, sparks, welding and smoking.



Approved by

