



chemicals processing plants and anti-chemicals flooring

**SYSTEM SPECIFICATION**

PROTECTIVE COATING SYSTEM

**ADVANTAGES**

- Excellent UV resistant with excellent color retention and weathering
- Excellent water resistance.
- Tough, hard wearing flexible film, with excellent color and gloss retention and weathering resistance
- Very high gloss and color retention.
- Non shrinking system with very good flexibility and very good mechanical properties and vibrations resistance.
- Very good adhesion to most of common substrate surfaces.
- Suitable for outdoor and indoor application.
- Very high coverage rate.
- Very high resistance to cold and hot weather in the same time
- Cures at low temperatures
- Very high resistance to sudden change in temperature (from cold weather to hot weather).
- Excellent adhesion with substrate with superior resistance to aggressive chemicals.
- Very good impact, scratching and abrasion resistance.
- Anti-sagging system (suitable for use with vertical surfaces and horizontal concrete).
- Fast cured system (dry to handle after 8 hours for foot and 20 hours for vehicles).
- Anti-slip surface, non-tainting, non-dusting.
- Can be applied on non-completely cured concrete (6 day old concrete or 2 day old polymer screeds).
- Can be easily over coated after long exposure periods

**BITUGUARD PU-70**

An excellent semi-gloss bituminous topcoat, high UV resistant two pack aliphatic cured acrylic polyol based

**DESCRIPTION**

- BITUGUARD PU70 is an aliphatic recoatable acrylic polyurethane topcoat with excellent gloss and very high UV resistance.
- BITUGUARD PU70 can be used as final coatings with exceptional resistance to temperatures up to 140°C.
- BITUGUARD PU70 can be can be podcasting with different colored aggregates

**PRINCIPAL CHARACTERISTICS**

- Unlimited recoatable finish
- Excellent resistance to atmospheric exposure conditions
- Excellent color and gloss retention
- Non- chalking, non- yellowing
- Cures at temperatures down to-5°C
- Tough and abrasion resistant
- Resistant to splash of mineral and vegetable oils, paraffin, aliphatic petroleum products and mild chemicals
- Can be recoated even after long atmospheric exposure
- Very good resistance to chemicals and water
- Can be applied by airless spray, roller and brush

**COLOURS, GLOSS AND APPEARANCE**

- BITUGUARD PU70 is two pack heavy duty aliphatic poly urethane with semi-gloss and smooth appearance
- BITUGUARD PU70 is available in black & dark grey color and can be podcasting with different colored aggregates

**PROPERTTIES & BASIC DATA AT 23°C**

<b>Solid content by wt.</b>	65 ± 2 %
<b>VOC (supplied)</b>	395 g/liter
<b>Specific Gravity</b>	1.3 ±0.3
<b>Recommended Dry Film Thickness Range</b>	50-80 µm
<b>Touch Dry</b>	1 hour
<b>Minimum Over coating Interval</b>	12 hours
<b>Maximum Over coating Interval</b>	7 days
<b>Full Cure</b>	7 days
<b>Pot Life</b>	4 hours
<b>Flash Point (Base)</b>	51°C
<b>Flash Point (Hardener)</b>	31°C
<b>Shelf Life</b>	12 months (stored in a cool dry place)
<b>Mixing Ratio by Weight (A: B)</b>	85:15
<b>Theoretical Spreading Rate</b>	11.2 m <sup>2</sup> / L / 60 microns

**WHERE TO USE**

- Tough, hard wearing flexible film, with excellent color retention and weathering
- Good chemical resistance and excellent water resistance.
- Can be easily over coated after long exposure periods
- Cures at low temperatures
- Used as a finish coat for various surfaces such as wood, concrete floors and structural steel of food and

**INSTRUCTIONS FOR USE**

Film Thickness and Spreading Rate:	Min	Max	Typical
Film thickness, dry (µm)	25	100	50
Film Thickness, wet (µm)	31	159	79
Theoretical Spreading Rate (m <sup>2</sup> /L)	25.2	6.3	12.6

**SURFACE PREPARATION**

**Suitable Surfaces**

- Steel and nonferrous metals properly prepared and blast cleaned to ISO-Sa2½
- Concrete free of contamination, dust and efflorescence, and properly prepared

**Bare Steel:**

Cleanliness: Blast – cleaning to Sa2 1/2 (ISO-8501-1:2007). Power tool cleaning to min. St2 (ISO 8501-1:2007) may be acceptable, subject to exposure conditions.

**Shop primed Steel:**

Clean, dry and undamaged approved shop primer

**Coated Surfaces:**

Clean, dry and undamaged compatible primer

WE COLOR THE FUTURE





**Other Surfaces:**

For aluminum substrates, thorough washing and sweeping with a nonmetallic blast medium is required.

**Mixing:**

Mixing ratio by volume: base to hardener 88:12

- The temperature of the mixed base and hardener should preferably be above 10°C otherwise extra solvent may be required to obtain application viscosity
- Too much solvent results in reduced sag resistance
- Thinner should be added after mixing the components

**Application Conditions**

Substrate temperature should be 10°C or above for application and during cure and a minimum of 3°C above the dew point. Adequate dry air ventilation is recommended for optimum drying.

**Application Information**

Thinning should only take place after the two components have been thoroughly mixed.

**AIR SPRAY**

**Conventional Air Spraying**

- Thin with 10 -12% Paint Thinner PROTHINNER PU, as required.
- Tip size – 1:1.5mm
- Tip pressure - 60 psi (0.3 : 0.4Mpa) approximately

**AIRLESS SPRAYING**

- Thin with 5-10% Paint Thinner PROTHINNER PU, as required
- Tip size - 0.33 -0.58 mm approximately
- Tip pressure - 2100 psi (15Mpa) approximately

**BRUSH / ROLLER**

- Thin if required with 5:10 % Paint Thinner PROTHINNER PU.

**CLEANING**

Equipment should be cleaned immediately after use with Paint Thinner PROTHINNER CL

**Drying time:**

Drying times are affected by air ventilation, temperature, film thickness and number of coats.

Substrate Temp	10° C	25°C	40° C
Surface Dry	60 min	30 min	15 min
Through Dry	4 h	2 h	1 h
Dry to recoat, minimum	12 h	4 h	2 h

The given data serve as guideline only. The actual drying time differs according to film thickness, ventilation, humidity and underlying paint system.

**PACKAGING:**

5 kg & 20 kg

**Handling:**

Handle with care. Stir well before use.

**THEORETICAL COVERAGE:**

5.5 - 6.5 M<sup>2</sup>/kg at 100 μ

Film Thickness and Spreading Rate:	Min	Max	Typical
Film thickness, dry (μm)	25	100	50
Film Thickness, wet (μm)	36	9	50
Theoretical Spreading Rate (m <sup>2</sup> /L)	25.2	6.3	12.6

**STORAGE:**

Keep the containers in a dry, cool, well ventilated space and away from source of heat and ignition. Containers must be kept tightly closed.

**HEALTH AND SAFETY:**

- All work involving the application and use of this product should be performed in compliance with all relevant national Health, Safety & Environmental standards and regulations
- Prior to use, obtain, consult and read well the Material Safety Data Sheet for this product and follow all precautionary notices.
- Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic or oxygen deficient hazards.
- This product may contains hazard materials or aggressive solvent.
- Take precautions to avoid inhalation of spray mist, skin, mucous membrane and eye contact by the use of safety equipment (gloves, goggles, face masks, barrier creams etc.) and other personal protection.
- If skin comes in contact, it should be thoroughly flushed and washed with fresh water and proprietary cleanser and soap.
- Eyes should be cautiously washed with fresh water or proprietary wash and medical attention obtained.
- Don't use solvents for skin cleaning
- Equipment and tools to be cleaned immediately after use with PROTHINNER CL
- Don't dispose of water or soil but according to local regulations.
- BITUGUARD PU70 is class 4 according to health and safety codes.
- Keep labelled until decontaminated

**ADDITIONAL INFORMATIONS**

PROTECH provides all type of coatings and construction chemicals which answers the queries of modern engineers for trouble free durable structure.

PROTECH create special and specific products when there are critical applications that require specific requirements (tailor made designs)

PROTECH technical office gives this information and recommendations relating to the application of products in this data sheet representing test results & practical experience obtained under a good and controlled conditions when properly stored, handled and applied under normal condition.





WE COLOR THE FUTURE

However, as products are often used under different conditions, we can only guarantee the quality of our product, and reserve the right to change data without further notice. **PROTECH** data are correct to the best of our knowledge and experience of products.

The differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose.

All orders are accepted subject to our current terms of sale and delivery.

**PROTECH** users should always refer to the most recent issue of the technical data sheet for the product concerned, copies of which will be supplied on request.

**PROTECH** technical services department is ready to provide our customers with more information and after sales support to assist our customers in a proper application, so don't hesitate to consult us.

