

Designed and Formulated in Australia by APC

DESCRIPTION

All Purpose Coatings Polyaspartic is a two-component, rapid curing aliphatic polyaspartic coating system with UV properties. This product is colourless as supplied.

- UV resistance for superior gloss retention.
- Mix Ratio 1:1
- Low Viscosity
- Good abrasion resistance
- High Gloss Level
- Solids 60%
- High Tensile Strength
- Fast Cure allowing rapid turnaround time
- Low VOC's
- Ambient Application Temperature range: 2°C to 40°C
- In – Service Temperature range: -15°C to +90°C

RECOMMENDED USES

All Purpose Coatings Polyaspartic is recommended as a topcoat over epoxy coatings to protect the epoxy from the effects of UV. It is also suitable for prepared concrete, plywood and steel surfaces as a protective coating system. It forms a waterproof membrane. APC Polyaspartic is specifically formulated to be installed in thin film applications.

AREAS OF USE

- Domestic, commercial and industrial floors
- Restaurant Floors
- Warehouses
- Factories
- Food processing operations
- Cold storage area floors
- Chemical plants
- Garage Floors

FEATURES AND BENEFITS

Rapid cure rates and return to service, user-friendly working times and the ability to reach full cure in cold-climate environments. Polyaspartic coating systems feature long-lasting durability, optimal coating adhesion and good UV stability.

PHYSICAL PROPERTIES

Hardness		
- Pencil	2H	
- Pendulum	160	
Tensile Strength (psi)*	6,500	ASTM D-412
Elongation	6-8	ASTM D-412
Impact Resistance, lbs (kg)	100 (45.4)	
Taber Abrasion Resistance	50-60	ASTM D-4060
(mg of loss/1000 cycles) CS17 Wheel; 1000 grams weight		
Specific Gravity (grams)	1.0	ASTM D-792
Water Absorption (%)	0.5	ASTM D-570
Water Vapour Transmission		ASTM E-96
Rate of Transmission, grains/h ft ²	0.58	
Permeance (perm, in-lb)	1.39	
Theoretical VOC	0.82	
QUV Weather meter, 4,000 hours		
. Oxidation	No Effect	
. Loss of gloss	No Effect	
. Blistering	No Effect	
. Yellowing	No Effect	

*Properties were checked on dry films at 0.127 to 0.152mm (5-6mil) thick, air dried for 7 days.

Specifications:

Pot Life @ 24°C/50%RH 30-40 minutes

Cured Film Hardness 65 ±2 Shore D [ASTM D – 2240]

Tear Resistance * 400 ± 50 pli [Die C – ASTM D-624]

Tensile Strength* 3000 ± 200 psi [ASTM D-412]

Ultimate Elongation 100 ± 20% [ASTM D-142]

Specific Gravity Part A = 1.13 Part B = 1.05

Total Solids by Weight 60 ± 2%

Viscosity at 24°C Part A = 600 ± 200 cPs, Part B = 1100 ± 300 cPs

Volatile Organic Compounds 12 gms / litre [ASTM D-2369-81]

SURFACE PREPERATION

Surfaces must be clean, dry and free from all traces of loose material, old coatings, curing compounds, release agents, laitance, oil and greases etc. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa and with moisture content below 4%.

Structurally unsound layers and surface contaminants must be mechanically removed by grinding or other methods. Substrates heavily impregnated with oil must be cleaned by grinding or suitable solvent cleaning methods. To check that all traces of oil have been completely removed, sprinkle a few drops of water over the surface. If all water is quickly absorbed, the surface is sufficiently oil and grease free. If water forms into globules that remain on the surface, further thorough treatment of the substrate is necessary.

Surface must be dry before application of product. Acid or wet etching is not recommended.

MIXING

Part A and Part B should be stirred individually before combining. Use a slow speed drill fitted with a flat blade type mixer. Mix well without aerating the component liquids.

MIXING OF SYSTEM COMPONENTS: It is recommended to adjust each Component's temperature to 15 - 25°C prior to mixing. DO NOT mix more material than can be used within 30 minutes.

Add equal Parts by Volume 1:1 of each Component of (A & B) to a clean and dry bucket. ii. Mix with a slow speed 'paddle type' powered mixer until a homogeneous mixture is obtained (at least 3 minutes). DO NOT aerate the product when mixing as this may result in pinholes / blisters in applied coating or shorten the Pot Life of the mixed product. Use care to scrape the sides of the mixing container to ensure that no unmixed material remains.

APPLICATION

***This product should only be applied by an experience installer.**

All Purpose Coatings Polyaspartic can be applied with a roller, brush or by high pressure spray. APC Polyaspartic should be applied at a minimum film thickness of minimum 5m² per litre. It should be noted that the heavier the application, the longer the curing process takes. Apply APC Polyaspartic evenly over the entire area to be coated.

Surfaces must be dry, clean and free of foreign matter Clear coating may turn opaque and cloudy due to moisture penetration, especially in exterior applications. Coated surface may be slippery when wet. Containers that have been opened must be used as soon as possible. Do not use where rising damp is an issue

NOTE: Caution should be taken in relation to the quantity of each batch mix size, application time and thickness of application.

Equipment should be cleaned immediately after use with APC Special Thinners.

COVERAGE

4 – 6m² per Litre over APC Flake System

RETURN TO SERVICE

At nominally 20°C and 50% relative humidity, allow each coat to cure for a minimum of 3 to 4 hours between coats. The pot life will be directly affected by the relative humidity. Allow a minimum of 6 hours before permitting light pedestrian traffic. Allow at least 24 to 48 hours depending on the atmospheric [ie.curing] conditions, before permitting heavy pedestrian or auto traffic on the finished surface.

Higher temperatures and/or high humidity will accelerate the cure time. Low temperatures and/or low humidity will extend the cure time. Uncured APC Polyaspartic is very sensitive to heat / moisture and surface marking.

SHELF LIFE

1 Year from date of manufacture in original, factory sealed containers when stored in an environment at 15°C to 35°C. Do not store near sources of external walls subject to heat or cold.

POT LIFE

30 – 40 minutes @ 24°C

IMPORTANT NOTICE: Read the SDS and TDS carefully prior to the use of any product. Application, performance & safety data may change from time to time. In emergency, contact the Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice. **IF THE SITUATION IS LIFE THREATENING, DIAL 000.**

PRODUCT DISCLAIMER: Read the SDS & TDS carefully before use of any product. These documents contain information in context to how you will apply the product, including if it is being used in conjunction with any other products, the type of surfaces and the manner in which the product will be applied. All Purpose Coatings Pty Ltd does not accept any liability either directly or indirectly for any losses that arise from the use or application of the product in accordance with any advice, specification, recommendation or information given by All Purpose Coatings Pty Ltd.