

SpecQuick Polyaspartic DTM 90

Direct to metal polyaspartic coating for interior & exterior metal surfaces

A unique direct to metal coating based on two component, high solids, high gloss, polyaspartic (polycarbamide) technology, providing a durable coating for interior & exterior metal surfaces and an increase in productivity.

Intended Uses:

SpecQuick Polyaspartic DTM 90 has been formulated as a rapid curing, solid pigmented primer/topcoat system on properly prepared steel for decorative and protective applications in moderate to highly corrosive environments with high levels of salinity. SpecQuick Polyaspartic DTM 90 is applied either direct to metal or on top of Inorganic Zinc Primer for corrosion protection in C5-M environments.

When cured, SpecQuick Polyaspartic DTM 90 has excellent colour and UV stability, abrasion, impact and wear resistances, exceptionally high gloss, with a smooth finish.

SpecQuick Polyaspartic DTM 90 adheres extremely well to properly prepared, steel, epoxy and polyaspartic substrates.

The correct application of SpecQuick Polyaspartic DTM 90 results in a reduction of the number of coats of a typical 3 coat epoxy/polyurethane system thus resulting in cost and labour savings while combining the benefits of epoxy and polyurethane.

SpecQuick Polyaspartic DTM 90 is suitable for applications such as, commercial & industrial facilities, cold storage areas, food processing areas, pulp and paper mills, wind turbines & energy renewal, structural steel, railway industry, marine applications, bridges, refineries, and any areas requiring above average chemical, abrasion and corrosion resistance.

Properties:

- High tensile strength.
- UV stable & non-yellowing.
- Excellent penetration and adhesion to properly prepared substrates.
- 1 day installation with next day return to service.
- Low VOC.
- Short re-coat time: 2-3 hours, maximum of 8 hours.
- Excellent chemical, graffiti, and stain resistance.
- Excellent application in hard to coat areas.
- Up to 31 % improvement in productivity.
- Typical thickness
 - As a stand-alone system: 200 – 250 microns DFT (in one or two coats).
 - Applied on Inorganic Zinc at 75 microns DFT (Total 275 – 325 microns).
- Applied using roller, brush, or spray application.
- Fabricator able to move steel within 2 – 3 hours.
- Proven performance technology.

Technical Data:

Colour	Various
Finish	High gloss
Volume Solids	90%
Mix Ratio (Volume)	4 part(s) base : 1 part(s) activator by volume
Activator	PU Activator 90
Typical Film Thickness	100 – 300µm DFT per coat
Theoretical Coverage	• 9 m²/ Litre @ 100µm DFT • 6 m²/ Litre @ 150µm DFT • 4.5 m²/ Litre @ 200µm DFT • 3.6 m²/ Litre @ 250µm DFT • 3 m²/ Litre @ 300µm DFT
Method of Application	Brush, roller, or airless spray
Number of Coats	1 – 2. Refer to “Systems & Compatibility”
Flash Point	N/A
Induction Period	Not required
V.O.C	Consult with Specialized Coating Systems
Pot Life	40 minutes @ 25°C
Minimum Re-Coat Time	2 – 3 hours @ 25°C
Maximum Re-Coat Time	8 hours @ 25°C
Temperature Resistance	Dry continuous – 93°C* Non continuous – 121°C

Drying Information:

	0°C	5°C	10°C	25°C	30°C	40°C
Touch Dry	-	-	-	1 hr	-	-
Light Traffic	-	-	-	2.5 hrs	-	-
Heavy Traffic	-	-	-	24 hrs	-	-
Overcoating Data – See Limitations						
Substrate Temp.	0°C	5°C	10°C	25°C	30°C	40°C
Minimum	-	-	-	2.5 hrs	-	-
Maximum	-	-	-	8 hrs	-	-
Full Cure	-	-	-	24 hrs	-	-

* SpecQuick Polyaspartic DTM 90 can be overcoated after it has become tack free. If the over coating window has been exceeded the substrate must be thoroughly sanded prior to re-coating.

Certifications:

Consult a Specialized Coating Systems technical representative for details.

Systems & Compatibility:

Consult a Specialized Coating Systems technical representative for specific coating system solutions.

Surface Preparation:

All surfaces to be coated must be dry, clean, and free from contamination or previous coatings and sealers which may impede adhesion. Always check the surface for any bond inhibitors prior to application. Do not use Alcohol to clean or tack substrate or previous coat prior to application. Any repairs must be addressed prior to application and should be repaired in accordance with manufacturer's instructions.

Industrial & Protective: Steel & Concrete Protection - Climatic

Steel - Abrasive Blast Cleaning and Mechanical Preparation

All surfaces to be coated must be dry, clean, and free from contamination. This product must only be applied to surfaces prepared by abrasive blast cleaning to SA 2½ in accordance with International Standard ISO 8501:2007 and SSPC-SP10. A sharp angular profile of 50 – 70 microns is recommended.

SpecQuick Polyaspartic DTM 90 must be applied before oxidation occurs. If oxidation does occur the entire oxidised area should be re-blasted to the standard specified above.

Surface defects revealed by the blast cleaning process should be ground, filled and treated in the appropriate manner.

Over Inorganic Zinc

SpecQuick Polyaspartic DTM 90 may be applied over Inorganic Zinc. Ensure re-coating instructions are strictly adhered to for proper adhesion to existing and new inorganic zinc.

A mechanical bond to a sanded profile is required for the SpecQuick Polyaspartic DTM 90 to have the best adhesion.

SpecQuick Polyaspartic DTM 90 should not be applied over polyurethane or acrylic coatings.

Application:

Mixing	Material is supplied in two containers as a kit. Always mix a complete kit in the quantities supplied. Once mixed the product should be used within the pot life specified. Stir the base component well with a flat-bottomed paddle or mechanical mixer until product is uniform. Continue stirring and add the entire contents of the activator container. Continue stirring until the mixture is homogeneous. Care must be taken not to entrain air bubbles during the mixing process. Ensure that sufficient material be mixed so that the product can be applied within its use-able life. The temperature of the mixed product should preferably be above 10°C. Higher temperatures result in reduced sag resistance and faster cure. If non-slip additive is to be incorporated, it should be done after mixing part A and B. Do not mix below the dew point, which will shorten the pot life.	
Mix Ratio	4 part(s) base : 1 part(s) activator by volume	
Pot Life	40 minutes @ 25°C	
Brush	Recommended	High quality brushes only
Roller	Recommended	Sponge or synthetic short nap roller
Airless Spray	Recommended	Tip Range 17 – 31 Thou. Pressure at the tip should not be less than 150 bar (2176 PSI)
Thinner	Solvent XL or MEK	Temperature can be used to control viscosity alternatively 0 – 15% can be added to reduce viscosity.
Cleaner	Solvent XL or MEK	For dry paint & equipment
Work Stoppage	Do not allow material to remain in spray equipment after use, thoroughly flush and clean all equipment with Solvent XL or MEK , do not use alcohols. Once the kit has been mixed, they should not be re-sealed and it is advised that of prolonged stoppages, work recommences with freshly mixed units.	
Application	SpecQuick Polyaspartic DTM 90 should be applied in a multi directional (north-south, east-west) motion to ensure proper coating thickness.	

Clean Up	Clean all equipment immediately after use with Solvent XL or MEK , do not use Alcohols. It is advisable to periodically flush out spraying equipment during the course of the working day. Frequency of cleaning is dependant of upon the amount sprayed, temperature and elapsed time. Work strictly in accordance with the specified pot life of the material.
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Environment:

	Surface Temperature	Ambient Temperature	Relative Humidity
Minimum	5°C*	5°C	No lower limit
Maximum	45°C*	45°C	85%

* High temperatures result in reduced sag resistance and faster cure.

Limitations:

- SpecQuick Polyaspartic DTM 90 requires a dry substrate and should not be applied to substrates with high levels of moisture vapour transmission.
- A thicker film build will have a longer curing time than film builds and may result in air entrapment.
- The product must be used within the short pot life specified.
- Overcoating times must be strictly adhered to, failing to do so will result in intercoat delamination.
- This product will dry extremely fast in humid conditions.
- Overcoating information is given for guidance only and is subject to local climate and environmental conditions. Consult a Specialized Coating Systems representative for specific recommendations.
- Unmixed material (in closed containers) should be maintained in protected storage in accordance with information given in the STORAGE section of this data sheet.
- Technical and application data herein is for the purpose of establishing a general guideline of the coating application procedures.
- Test performance results were obtained in a controlled laboratory environment and Specialized Coating Systems makes no claim that the exhibited published test results, or any other tests, accurately represent results found in all field environments. As application, environmental and design factors can vary, due care should be exercised in the selection and verification of the performance and use of the coating.

Pack Size:

1, 5 & 20 Litre.

Storage:

- Shelf Life: 18 months minimum at 25°C from date of manufacture. Subject to inspection thereafter.
- Store in dry conditions out of direct sunlight, away from sources of heat or ignition.
- Maintaining a consistent storage temperature prior to application will maximize working time.

Precautions:

For complete safety and handling information please refer to the appropriate Safety Data Sheets prior to using this product.