



COROTHANE™ PUR SW

1-PACK TAR-FREE POLYURETHANE COAT

Revised 07/2023 Issue 1

PRODUCT DESCRIPTION

A high abrasion resistant, moisture-curing, 1-pack coating based on polyurethane.

Low solvent content according to Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).

- Tough-hard, robust
- Early exposure to water
- Suitable for application at low temperatures and high relative air humidity
- Suitable for cathodic protection systems

RECOMMENDED USE

Can be used as a heavy-duty coating system for the corrosion protection of steel in contact with water, e.g. hydraulic steel structures, chemical industry, harbour and lock installations, etc.

Especially suitable for refurbishment of old black coatings (e.g. coal tar pitch and tar epoxy coatings).

PRODUCT TECHNICAL DATA

Volume Solids: 72 ± 2% (ISO 3233-3)

Weight Solids: 80 ± 2%

VOC: 280 g/l determined practically in accordance with Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).
279 g/l calculated from formulation to satisfy EC Solvent Emissions Directive.
199 g/kg calculated from formulation to satisfy EC Solvent Emissions Directive (UK).

Colours: Black, redbrown, approx. RAL 7032, approx. RAL 9002.

Slight colour deviations are possible due to raw material characteristics.

Corothane™ PUR SW tends to chalking and yellowing when frequently exposed to weathering.

In case of higher requirements an additional 2-pack PU topcoat e. g. Acrolon® EG-4 or Acrolon® EG-5 is recommended.

Flash Point: 37°C.

Cleaner/Thinner: Thinner S (for cleaning).
Thinner S for thinning with max. 5% to adapt the viscosity.
Thinning will affect VOC compliance, sag tolerance and dry film thicknesses.
Note: To ensure complete curing, only the recommended Thinner must be used exclusively. Other Thinners may lead to curing defects.

Pack Size: Single component material:
15 kg (10.7 litre)
Volume will vary with colours and density.

Density: 1.4 kg/l (may vary with colours).

Shelf Life: 6 months from date of manufacture, stored in originally sealed containers in a cool and dry environment.

Recommended Application Methods:

Airless Spray, Brush and Roller

Typical Thickness:

	Recommended Spreading Rate Per Coat	
	Typical	Maximum Sag
Dry	200 µm	400 µm
Wet	278 µm	556 µm
Theoretical Consumption*	0.389 kg/m ² 0.278 l/m ²	
Theoretical Coverage*	2.57 m ² /kg 3.60 m ² /l	

* This figure makes no allowance for surface profile, uneven application, overspray or losses in containers and equipment.

Film thickness will vary depending on actual use and specification.
Apart from small areas the dry film thickness of Corothane™ PUR SW should not exceed 400 µm per coat.



COROTHANE™ PUR SW

1-PACK TAR-FREE POLYURETHANE COAT

Revised 07/2023 Issue 1

AVERAGE DRYING TIMES

For 200 µm Dry Film Thickness:

	+ 20°C
Dry to handle	4 hours
To Recoat	4 hours

Maximum recoat time is 6 months. Prior to further applications all contamination must be removed. In the case of extended recoating times consult Sherwin Williams customer service.

Final cure: 1 week, depending on film thickness and temperature.

These figures are given as a guide only. Factors such as air movement, film thickness and humidity must also be considered.

APPROVALS & ENDORSEMENTS

- Tested and listed by the German Federal Waterways Engineering and Research Institute (BAW).
- Tested according to NORSOK M501, rev. 6, system No. 1.

SURFACE PREPARATION

Ensure surfaces to be coated are clean, dry and free from all surface contamination such as oil, grease, dirt and corrosion products to achieve satisfactory adhesion.

For contaminated surfaces we recommend to clean with Cleaner Wash.

Steel surfaces shall be blast-cleaned to Sa 2½ according to ISO 8501-1 (ISO 12944-4)

Old coatings

In case of well adhering old coatings only thorough cleaning is sufficient. If necessary the adhesion of the maintenance coat may be increased by sweep blasting of the old coating. Remove loose particles. In case of exposure to submersion, condensation and splash water damaged areas must be derusted to PSa 2½. In case of exposure to weathering surface preparation to PSt 3 is sufficient. Application of a trial area is strongly recommended.

MIXING

The material is supplied ready for use; stir thoroughly with a mechanical paint mixer prior to application.

Opened units must be used within one day.

During mixing and handling of the materials always wear protective goggles, suitable gloves and other protective clothing.

APPLICATION CONDITIONS

Substrate temperature shall be above 0°C and at least 3°C above the dew point. The surface must be dry and free from ice.

Material temperature shall be above + 5°C.

Relative air humidity shall be at least 30% and below 98%.

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for satisfactory application characteristics. Always purge spray equipment before use with listed cleaner. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Airless Spray

Unit: Efficient airless equipment

Tip Size: 0.43 – 0.69 mm (0.017 – 0.027 inch)

Fan Angle: 50° - 80°

Operating Pressure: min. 180 bar (2600 psi)

Spray hoses: Ø ¾ inch (10 mm)

The airless spray details given above are intended as a guide only.

Details such as fluid hose length and diameter, paint temperature and job shape and size all have an effect on the spray tip and operating pressure chosen. However, the operating pressure should be the lowest possible consistent satisfactory atomisation.

As conditions will vary from job to job, it is the applicators responsibility to ensure that the equipment in use has been set up to give the best results.

If in doubt consult Sherwin-Williams customer service.

Brush and Roller

The coating is suitable for brush and roller application. Application of more than one coat may be necessary to give equivalent dry film thickness to a single spray applied coat.



COROTHANE™ PUR SW

1-PACK TAR-FREE POLYURETHANE COAT

Revised 07/2023 Issue 1

RECOMMENDED SYSTEMS

Steel

1 x Corothane™ Zinc PUR
2-3 x Corothane™ PUR SW

Maintenance coating on steel

Touch up with
1 x Corothane™ PUR-1
1-2 x Corothane™ PUR SW

ADDITIONAL NOTES

Drying times, curing times and pot life should be considered as a guide only.

Chemical resistance:

Resistant to freshwater, brackish and salt water, neutral salts, mineral and fuel oils, fat, oils, detergents etc.

Temperature resistance:

Dry heat up to + 100°C.

In case of higher temperatures consult Sherwin-Williams customer service.

Numerical values quoted for physical data may vary slightly from batch to batch.

HEALTH & SAFETY

Consult Product Health and Safety Data Sheet for information on safe storage, handling and application of this product.

WARRANTY

Whilst all statements made about our products (whether in this data sheet or otherwise) are correct and accurate to the best of our knowledge, we have no control over the quality or the condition of the substrate, the application conditions or the many other factors affecting your use and application of our product.

The appropriateness of the product under the actual conditions of application or intended use must be determined exclusively by you. The content of this document, and of any oral or written statements already made or to be made in relation to the subject matter of this document, including any suggestions as to appropriate products and any proposed application methods, technical details and other product information represent only test results or experience obtained under controlled or defined circumstances, and is therefore provided for general information purposes only.

Unless we agree specifically in writing to do so, we will not be liable to you for any loss or damage whether in contract, tort (including negligence), breach of statutory duty, misrepresentation, misstatement or otherwise, arising under or in connection with this document or such statements.

We disclaim any express or implied representations, warranties or guarantees (including any implied warranty of merchantability or fitness for a particular purpose), though nothing in this disclaimer excludes or limits our liability for death or personal injury arising from our negligence, or our fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by law.

All products supplied and technical advice given are subject to our Standard Terms and Conditions of Sale which you should request a copy of and review carefully.

This document may be modified and updated from time to time, and is uncontrolled once printed. It is the users responsibility to ensure they are using the most up to date version – this can be found at: www.sherwin-williams.com/protectiveEMEA.

If this datasheet has been translated, then it has been done using the English version as the source. In case of any queries, please refer to the master English version which can be found at: www.sherwin-williams.com/protectiveEMEA.