



PURMAL S-30 P

DESCRIPTION



Semi-matt, fast drying polyurethane enamel cured with aliphatic isocyanate. The product can be used to paint steel surfaces previously primed with EPOXYKOR or polyurethane primer manufactured by Malchem, as well as galvanized steel and aluminum substrates.

COLOUR



RAL and NCS colours

PROPERTIES

- very fast drying time
- high color fastness
- very high resistance to chemical agents (including solutions acids, bases, gasoline and diesel)
- very high resistance to mechanical factors
- water resistance
- resistance to flammable substances
- temperature resistance up to 120 ° C (temporary increase to 160 ° C)
- resistance to aggressive factors of the urban, rural and industrial atmosphere

USAGE

The product is used as a topcoat for protection anti-corrosive in:

- infrastructure construction (bridges, flyovers, footbridges, railings, etc.),
- industrial construction (support elements, silos, sheets, containers, supporting structures),
- mechanical and shipbuilding industries (aquatic parts of ships, equipment and agricultural, construction and mining machinery).

SPECIFICATIONS



Brookfield viscosity 1000-2000 mPas for an ambient temperature of 20 +/- 2 °C

Density 1,35 (+/-0,03) g/cm³

VOC content of olatile organic compounds To 417 g/l

Solvent content 33 Weight %.

Solid content 60 (+/-3) Volume %

Covering power, color stability

For some colors, obtaining full coverage may require the application of another layer.

Aggressive chemical environment and elevated temperature (over 100 °C) can affect color stability.

High humidity and condensation can cause discoloration and reduced gloss, especially for colors containing metallic pigments.

For yellow, orange and red it is recommended to use a white or similar topcoat primer.

Working temperature



Coating can work at the temperature 120°C in a dry atmosphere. The temperature may rise to 150°C temporarily.



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Layer thickness	DFT " dry film thickness"	WFT " wet film thickness"	Theoretical consumption		Theoretical performance
	[μm]	[μm]	[l/m ²]	[kg/m ²]	[m ² /l]
	50	90	0,089	0,113	12,00
	60	100	0,100	0,135	10,00
	120	200	0,200	0,270	5,00

APPLICATION



Application method

Brush (small areas), roller, pneumatic spray, airless spray.

Hydrodynamic spraying

Nozzle tip	Dilute %	Pressure
0,011 - 0,015 "	0 - 5 %	100 - 200 Bar

The width of the sprayed jet, the so-called spray angle, should be chosen taking into account the shape and size of the surface to be painted.

Air spraying parametrs

Nozzle tip	Dilute %	Pressure
1,5 - 2,5 mm	5 - 10 %	2,5 - 5,0 Bar

The recommended product flow time measured with Ford Cup No. 4 for pneumatic spraying is within 25 - 35 seconds.

These parameters should be compared with those recommended by the spray gun manufacturer.

Thinner

THINNER PUR production of Malchem.

Recommended number of layers

1-2

Coating enamels

PURMAL products production of Malchem.

Surface preparation

Surface	Preparation
Steel	The surface should be cleaned to at least grade 3 in accordance with PN-EN ISO 8501-1: 2008 (excluding applications in the C5-I and C5-M environment, for which the degree of cleaning is Sa 2 1/2). Dry ground, free of corrosion, scale, dust, grease, oil, salt and all other contaminants. To degrease the surface, it is recommended to use MALCHEM Cleanmal Top.
Galvanized steel, aluminum	The galvanized and aluminum surface should be cleaned of the abovementioned impurities, degrease very thoroughly with Malchem CleanMal Top and dried. In addition, it is recommended to lightly sweep the so-called abrasive "Sweeping" or washing with water and ammonia (slightly alkaline pH) and rinsing thoroughly.



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Application conditions

- Temperature: minimum substrate -5°C, minimum 3°C above dew point temperature, minimum ambient -5°C
- Humidity: maximum relative air 80%
- Safety: efficient and adequate ventilation in the workplace

Mixing of components



Version IN PLANT		
	Component A: Base	Component B: Hardener 601
by weight	100	9
By volume	100	12

Ready to use

5-10 minutes (in temp. 20+/-2°C)

Pot-life of mixture

1 hours (in temp. 20+/-2°C)

Drying times (at temp. 2 °C and relative humidity 55+/ 5%)

For layer DFT 100 (+/-10%) µm (in temp. 20±2°C and relative humidity 55 ± 5%)	
Degree 1	1 min
Degree 3	3,5 h
Completely cure	7 days
Minimum for applying the next coat	2 h

These parameters may vary with changing environmental conditions, the number and thickness of the layers. The negative effect on the curing of the coating is, first of all, insufficient temperature and high humidity (rain, condensation of water vapor).

ADDITIONAL INFORMATION

Storage



The material should be stored in original, tightly closed containers, away from possible sources of fire, in places exposed to direct sunlight or elevated temperatures, children should be protected from access to products, storage temperature: from 5 ° C to 30 ° C.

Shelf life



The minimum shelf life indicated on the package is the value of the indication, which depends on a number of factors - first of all, the method and temperature of storage. After exceeding the specified date, the quality of the product must be reviewed.



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Safety information



Basic security measures

Information on the presence, detection of threats, actions during first aid and in case of fire, as well as environmental and legal regulations can be found in the safety data sheet, which can be obtained from the manufacturer Malchem.

- Read the information on the product packaging.
- Efficient and appropriate ventilation at the workplace.
- Avoid contact with skin and inhalation of vapors.
- Use of costumes, gloves and masks.
- If the product comes in contact with skin, wash the area with warm water and soap or other detergent.

In case of contact of the product with eyes, rinse immediately with water and seek medical advice immediately.

PRODUCT IS INTENDED FOR PROFESSIONAL USE ONLY

The above information is based on our current knowledge and experience. However, they are not completely exhaustive and complete. We provide them in good faith based on laboratory research and practical experience. However, due to the variety of methods, application and usage conditions, they should be verified in specific applications. The product is intended only for professional and industrial use by persons who have sufficient knowledge and experience in its use. The manufacturer cannot control the conditions under which the product is used. Under applicable regulations, we do not take responsibility for damages caused by using the product in a manner inconsistent with applicable standards and recommendations. Use of the product for purposes other than indicated in this document only and exclusively at the user's own risk. The product information provided is subject to change without notice.