

NEOMAL 20



MALCHEM
PROTECTIVE & INDUSTRIAL
COATINGS

DESCRIPTION



"TOPCOAT SUPER FINE" polyurethane enamel, fast drying, cured with aliphatic isocyanate, very high gloss, available in RAL, NCS and company colors. With increased resistance to abrasion and scratching.

COLOUR



According to RAL and NCS colors

PROPERTIES

- very fast drying time
- high durability of color and gloss
- very high resistance to chemical agents (including solutions of acids, bases, gasolines and diesel fuel)
- very high resistance to mechanical factors
- water resistance
- resistance to flammable substances
- temperature resistance up to 150°C (temporary increase to 180°C)
- resistance to aggressive factors of the urban, maritime and industrial atmosphere

USAGE

The product is used as a topcoat for corrosion protection in:

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

SPECIFICATIONS



Brookfield viscosity	500-1000 mPas	for an ambient temperature of 20±2°C
Density	1,05 (±0,03) g/cm ³	
VOC content of volatile organic compounds	To 400 g/l	
Solvent content	35 Weight %.	
Solid content	60 (±3) Volume %	
Covering power, color stability	<p>For some colors, obtaining full qualitative coverage may require the application of an additional layer of paint.</p> <p>Aggressive chemical environment and elevated temperature (above 100°C) can affect the color stability of some shades.</p> <p>High humidity and condensation can cause discoloration and reduced gloss, especially for colors containing metallic pigments.</p> <p>For yellow, orange and red it is recommended to use a white or similar topcoat primer.</p>	

NEOMAL 20



MALCHEM
PROTECTIVE & INDUSTRIAL
COATINGS

Working temperature

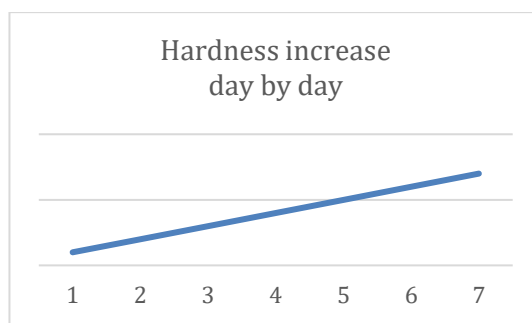


Coating can work at the temperature 150°C in a dry atmosphere.
The temperature may rise to 180°C temporarily.

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	0,091	0,102	10,99
60	110	0,109	0,122	9,17
110	200	0,200	0,224	5,00

Coating hardness



Gloss grade



≤10% (deep matt)

APPLICATION



Application method

Brush (small areas with the addition of 20% thinner), roller,
pneumatic spray, airless spray.

Hydrodynamic spraying

Nozzle tip	Dilute %	Pressure
0,009 - 0,013 "	0 - 10 % *	150 - 200 Bar

*Depending on the application temperature.

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 - 15 % *	2,5 - 5,0 Bar

*Depending on the application temperature.

NEOMAL 20



MALCHEM
PROTECTIVE & INDUSTRIAL
COATINGS

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 NEO production of Malchem.

Recommended number of layers

1-2

Coating enamels

Products type PURMAL production of Malchem.

Surface preparation

Surface	Preparation
Steel	The surface should be protected with an anti-corrosive primer type EPOXYKOR HS 80 (SF) made by Malchem, the surface to be painted dry, free of grease, dust, traces of corrosion and all other impurities.
Galvanized steel, aluminum	The galvanized and aluminum surface should be cleaned from 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.

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



	Component A: Base	Component B: Hardener 605
by weight	100	22
by volume	100	25

Ready to use

15 minutes (in temp. 20±2°C)

Pot-life of mixture

4 hours (in temp. 20±2°C)

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

For layer DFT 100 (±10%) µm	
Degree 1	2 h
Degree 3	5 h
Completely cure	7 days
Minimum for applying the next coat	1 h

These parameters may vary with changing environmental conditions, the number and thickness of the layers. The negative effect on the

NEOMAL 20

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PROTECTIVE & INDUSTRIAL
COATINGS

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.

Safety information



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.

Basic security measures

- 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.