NORMASTIC 405 AL

TECHNICAL DATA SHEET 3/19

PROPERTIES AND RECOMMENDED USAGE

Paint type
NORMASTIC 405 AL is a two-component, epoxy based paint, which may be applied in high film thickness. Contains micaceous iron oxide and aluminium pigments. Contains also special ingredients which penetrate through existing rust.

Typical and recommended uses
NORMASTIC 405 AL is used on steel surfaces as a primer in environment classes C2-C5. Can be used as a single coat aluminium colour on box girders and plate structures. Also suitable for mainte-nance painting on deep-seated rust and old paint surfaces. Suitable e.g. for painting paper machines, bridges, navigation marks and ships. NORMASTIC 405 AL can also be used for immersion service in fresh water and sea water.

Chemical resistance
Used in recommended paint systems and correctly applied NORMASTIC 405 AL has good resistance to water and range of process chemicals when exposed to immersion or continued spillage.

Weather resistance
Epoxy paints have a natural tendency to chalk and discolor on exterior exposure.

Colour
Aluminium and RT-aluminium

Finish
Semi matt

TECHNICAL DATA - STANDARD COMP. B

Volume solids*	80 ± 2 %
Total mass of solids*	1190 g/l
VOC value*	180 g/l

* Values are calculated

Mixing ratio

Resin	1 part by volume
Cure	1 part by volume

Pot life (+23 °C)
approx. 1 h after mixing (Reduced at higher temperatures.)

Packaging

	Volume (l)	**Size of container (l)**
Comp A	10	20
Comp B	10	10

Drying time 200 µm

	+23 °C
To touch	3 h
To handle	5 h
To overcoat with itself	7 h
Fully cured	7 d

When exposed to immersion min. recoating time is 10 hours or when the film thickness can be measured. Take care of good ventilation during the application and drying time. Drying times are typical on recommended film thicknesses at given temperatures.

Calculated theoretical coverage and recommended film thickness

Dry	**Wet**	**Coverage**
120 µm	150 µm	6.7 m²/l
200 µm	250 µm	4.0 m²/l
300 µm	375 µm	2.7 m²/l

Practical coverage
Depends on wind conditions, structure to be painted, roughness of the surface and application method.

Thinner
OH 17, OH 31 (slow)

Cleaner
OH 17

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TECHNICAL DATA - WG COMP. B

Volume solids*	74 ± 2 %
Total mass of solids*	1140 g/l
VOC value*	230 g/l

* Values are calculated

Mixing ratio

Resin	1 part by volume
Cure	1 part by volume

Pot life
approx. 1 h after mixing (+23 °C)
approx. 3 h after mixing (+10 °C)
(Reduced at higher temperatures.)

Packaging

	Volume (l)	**Size of container (l)**
Comp A	10	20
Comp B	10	10

Drying time 200 µm

	-5 °C	**0 °C**	**+5 °C**	**+10 °C**	**+23 °C**
To touch	24 h	18 h	12 h	6 h	4 h
To handle	48 h	26 h	18 h	12 h	5 h
To overcoat - with itself - polyurethanes	 48 h -	 26 h -	 18 h 96 h	 12 h 48 h	 6 h 16 h
Fully cured	21 d	14 d	7 d	3 d	2 d

When exposed to immersion, minimum recoating time is 24 hours.

Calculated theoretical coverage and recommended film thickness

Dry	**Wet**	**Coverage**
120 µm	160 µm	6.3 m²/l
200 µm	270 µm	3.7 m²/l
300 µm	405 µm	2.5 m²/l

Practical coverage
Depends on wind conditions, structure to be painted, roughness of the surface and application method.

Thinner
OH 17, OH 31 (slow)

Cleaner
OH 17

APPLICATION INSTRUCTIONS

Surface preparations
All solid impurities that could prevent adhesion should be removed from the surfaces to be painted. Remove salts and other water soluble impurities using fresh water with brush, high pressure-, steam- or alkali cleansing. Remove grease and oils by alkali-, emulsion- or solvent cleansing (SFS-EN ISO 8504-3, SFS-EN ISO 12944-4). The surfaces should be rinsed carefully with fresh water after clensing. Old, painted surfaces, in which maximum overcoating interval has expired, additional roughening with suitable method is recommended. The place and time for the surface preparation should be chosen correctly, to avoid contamination and moistening of the treated surface before the paint application.

Steel surfaces
Exposed to weather: Blast cleaning to Sa 2 or wire brushing to min. St 2.
Exposed to immersion: Blast cleaning to min. Sa 2½ (SFS-ISO 8501-1, SFS-EN ISO 8504-2).

Old painted surfaces
NORMASTIC 405 AL may be used over most types of properly prepared and tightly adhering coatings, however a test patch is recommended for use over existing coating.

Primer
NORMASTIC 405 AL, NORMAZINC SE, EPOCOAT 21 PRIMER, EPOCOAT 21 HB

Top coat
NORMASTIC 405 AL, EPOCOAT 210, NORMADUR HB, NORMADUR 50 HS, NORMADUR 65 HS, NORMADUR 90 HS

Environmental conditions during application Standard Comp. B
The surface to be coated must be dry. During application the temperature of the coating, air and surface should be above +10 °C, and the relative air humidity below 80 %. The temperature of the surface to be coated should be at least 3 °C above the dew point of the air.

Environmental conditions during application Wintergrade Comp. B
The surface to be coated must be dry. During application the temperature of the coating should be above +10 °C, the painted surface and air above -5 °C and the relative air humidity below 80 %. The temperature of the surface to be coated should be at least 3 °C above the dew point of the air.

APPLICATION INSTRUCTIONS

Method of application

Use high pressure airless spray or brush. Stir resin and cure separately and then mix both components thoroughly. The mixing ratio is 1 : 1 (resin : cure) by volume. Thin only when needed 5 - 10 % (OH 17). High pressure airless spray with nozzle tip of 0.017” - 0.023” orifice. Spray angle depending on the object to be painted. In order to ensure the best possible performance of the product, it is recommended that the paint is at room temperature before the application.

Storage and shelf life

The product must be stored in original sealed containers at room temperatures from 5 °C to 30 °C. The storage conditions are to keep the containers in a dry, well ventilated space away from source of heat and ignition. When stored as descriped above, the unopened component A will keep up to 3 years and uno-pened component B to 3 years from the date of manufacture. The manufacturing date found in the label is also the batch number of the paint.

Safety

Please follow the environmental and safety instructions displayed on the container and Safety Data Sheet. Use under well ventilated conditions. Do not breathe or inhale mist, use respirator mask. Avoid skin contact. Spillage on the skin should immediately removed with suitable cleanser, soap or water. In case of contact with eyes, rinse immediately with plenty of clean water and if necessary seek medical advice.

Disclaimer

The above information is given to the best of our knowledge based on laboratory tests and practical experience. However, as the paint is often used under conditions beyond our control, we cannot guarantee anything but the quality of the paint itself. We reserve the right to change the given data without notice. Please contact our office for more specific information. The product is intended for professional use only. If there are deviations in the different language versions of the technical data sheets, the English version applies.