

## TECHNICAL DATA SHEET

### DESCRIPTION

**ProLine NE500** is a high-solids, two component, polyamine cured, phenolic / novolac epoxy coating for use as an internal tank lining. **ProLine NE500** is specifically formulated to provide exceptional corrosion protection in aggressive liquid environments.

### FEATURES

#### Provides:

- High chemical resistance.
- High resistance to continuous immersion with oxygenated gasoline with methanol and aliphatic hydrocarbons.
- High resistance to water, aliphatic hydrocarbons, and a broad spectrum of chemicals.
- Excellent resistant to solvents and salt solutions.
- High hardness and resistance to abrasion.
- High resistance to continuous immersion in water up to 100 °C.
- High resistance up to 200 °C (dry heat).
- Suitable for corrosion protection of aircraft fuel storage tanks and piping.
- Resistance all kinds of oils, hydrochloric acid <10%, phosphoric acid <10%, sulphuric acid <10%.

### RECOMMENDED USES

- Is recommended for inner tank lining of storage tanks and transporting liquid fuels (oxygenated gasolines with methanol, fuel, kerosene, chemical etc.).
- It is also recommended for non-potable water deposits and non-oxidant neutral or alkaline aqueous solutions.

### TECHNICAL DATA

#### Appearance

Color	White*, yellow oxide
Appearance	Matt

#### Material properties

Volume solids	78% ± 3%
Density after mixing	1.34 ± 0.03 g/mL
VOC value	329 g/l
Dry film thickness	100- 150µm per coat
Number of coats	2-3 coats

\*White colour may yellow

### SURFACE PREPARATION

Surface type	Minimum	Recommended
Surface profile	Ry5 (50–70 µm) (ISO 8503-1)	Ry5 50–70 µm) (ISO 8503-1)
Steel surfaces	Sa 2½ (ISO 8501-1)	Sa 2½ (ISO 8501-1)

Remove abrasive residues and dust from surface. Make sure that the salt content is such, that it results in a conductivity of less than 30 µS.  
Apply **ProLine NE500** as soon as possible after surface preparation to prevent contamination.

#### Concrete

Concrete should be left for at least 28 days so as to be fully cured, it should have also a minimum tensile strength of 1.5 N/mm<sup>2</sup> and a minimum compression resistance of 25 N/mm<sup>2</sup>. The paint system with **ProLine NE500** should be applied over clean and dry surfaces, without laitance, oil, grease or other pollutants and it should have a properly roughness. Good mechanical preparation with multi-purpose diamond disk machine, blaster or abrasive jet, is recommended. The surface humidity should not exceed 4 % in depth (with Tramex type equipment).

Coating system for concrete: Apply the first coat of **ProLine NE500**, with a 20 – 25 % dilution (sealer), and after apply 2 coats of coating.

#### Ambient conditions

Ambient air temperature	from 5 to +45°C
Surface temperature	from 5 to +45°C
Relative humidity	20-85%
Dew point	at least 3°C lower than steel temperature

### THICKNESS & THEORETICAL SPREADING RATE

#### Standard Grade

Dry Film Thickness	Wet Film Thickness	Spreading Rate
150 µm	193 µm	5.2 m <sup>2</sup> /l

**Note:** Practical coverage depends on the application conditions, structure to be painted, roughness of the surface and application method.

In order to achieve the best protective properties, it is recommended after a correct surface preparation, apply in two layers with a DFT 150 µm of each layer and a nominal system DFT of 300 µm.

### DRYING TIME

Dry Film Thickness 150 µ	10°C	20°C	30°C
Dry to touch	2 h	1 h	30 min
Dry to handle	6 h	2.5 h	2 h
Min. recoating interval (itself)	6 h	3 h	2 h
Max. recoating interval (itself)	3 weeks	14 d	7d

#### Note:

- Drying times and polymerization depend on the relative humidity, temperature, ventilation conditions and the thickness of the film.
- Drying times are dependent on temperature, ventilation and film thickness. It is recommended to let it dry for 7 days before using the tank.
- \* For application and drying temperatures between 15 – 23 °C, tank may be put into service after 15 days and in the extreme case of application and drying between 5 -15 °C only may be placed in service after 3 weeks.

For details please contact the Rayston Technical Sales Support.

### APPLICATION DATA

#### Mixing ratio: 1.5:1

Resin	1.5 parts by volume
Curing Agent	1 part by volume

Stir resin and curing agent separately (slow stirring) and then mix both components thoroughly with propeller stirrer for 5 minutes.

Before use the temperature of packaging and material should not be less than 3°C higher than the dew point. Do not make

partial mixtures, use all the content of the cans. Add thinner only after both components have been thoroughly mixed and stir the mixture.

#### Thinning:

Add 5-10% by volume of thinner Rayston thinner EP when thinning is needed for airless spray and conventional spray.

for brush and roller, only for touch up, patching, add 5% thinner.

**Note:** Adding a thinner will increase the drying time. In the case of using thinner other than recommended, the manufacturer not takes responsibility for any possible reduction in the quality of the coating!

#### Cleaner:

Rayston thinner EP

#### Pot life (+23 °C):

Approximately 2 hours.

### APPLICATION METHODS

#### Spray application:

Airless spray is the main method of application. For other spraying methods, viscosity correction may be required.

#### Brush:

Recommended for touch-up, stripe coating and small areas only. It is necessary to provide a nominal coating thickness.

#### Roller:

Only suitable for repair or minor touch-up work.

### PACKAGING

	Volume (liters)	Size of containers (liters)
Comp. A	12	20
Comp. B	8	10

### STORAGE & SHELF LIFE

The product must be stored in original sealed containers. The storage conditions are to keep the containers in a dry, well ventilated space away from source of heat and ignition.

Storage temperature	from 5 to 30°C
Component "A"	2 years
Component "B"	2 years

**Note:** After lasting storage primer shall be stirred thoroughly until its precipitation is spread over the suspension homogeneously. Precipitation in primer does not change its properties or worsen its quality.

After the expiration date has passed, it is necessary to check the quality of the paint material.

### SAFETY

Use with adequate ventilation. Do not inhale aerosol. Avoid contact with skin. After contact with skin, wash immediately with detergent, soap and water. In case of contact with eyes, rinse immediately with water and seek medical advice immediately.

**For detailed information on the health and safety protection for use of this product see Safety Data Sheet (SDS).**

### IMPORTANT NOTE

The above-mentioned information is given according to our laboratory tests and practical application experience.

The manufacturer takes into consideration the fact that the material can be used out of control; the manufacturer cannot give guarantees except of the material quality.

The manufacturer has the right to improve the product and change the above-mentioned data without preliminary notification.

**THE PRESENT TECHNICAL DATA SHEET REPLACES ALL PREVIOUS EDITIONS.**