

## COATING FOR PROTECTION IN HARSH OPERATING ENVIRONMENTS AND CONDITIONS

### DESCRIPTION

GLASS FLAKE 2912 N is a Novolac Epoxy coating bicomponent, of high thickness and high solids, free from solvents (LOW VOC). It has excellent chemical resistance, high temperature stability and good abrasion resistance and impact. Meets the requirements of Petrobras Standard N-2912 type II.

### APPLICATIONS

Recommended for internal lining of tanks fixed roof and floating roof for oil storage, diesel, fuel oil, lubricating oil, solvents, oil diesel, salt water and petroleum products. Used for external and internal protection of equipment and pipes for various highly aggressive chemicals. Can be used in internal and external coating of structures and pipelines on oil and natural gas platforms. Indicated for applications in the cellulose and chemical industries.

### CHEMICAL BASIS

Epoxy phenol novolac Cycloaliphatic polyamine / solvent free.

### PHYSICAL PROPERTIES

Solids by volume	96 ± 1%
Pot life at 25°C	45 minutes
Free drying time stickiness at 25°C	6 h
Maximum overcoating interval at 25 ° C.	24 h
Recommended wet thickness per coat	450 µm
Dry thickness	450 µm
Theoretical Consumption	2.13 m <sup>2</sup> /L
Drop thickness at 25 ° C	450 µm
Colors	White, Green, Gray
Maximum wet work temperature	110 - 120°C

### CURE AT 25<sup>0</sup>C

The total cure is obtained after 7 days at 25°C.

### SURFACE PREPARATION

#### SHOT BLAST PREPARATION

The surface must be dry, free of oil, dirt, dust, scale, weld spatter or other contaminants to ensure good adhesion.

### CARBON STEEL IN IMMERSION SERVICE

Remove all oil and grease from the surface using a cleaning solvent. Blasting with steel shot/grit until surface finish Sa 2 ½ (almost white metal) according to ISO 8501-1 (Equivalent to the Swedish standard SIS 05 5900-67). Abrasive blasting must present an anchoring profile with a roughness of 45 to 90 µm, necessary for the perfect adhesion of the coating to the carbon steel substrate.

### CHEMICAL RESISTANCE

Fluid resistant - Maximum temperature 120°C.

- y Salty water;
- y Potable fresh water or not;
- y Gasolines;
- y Ballast;
- y Foam liquid generator;
- y Diesel oil;
- y Aviation Fuel;
- y Caustic soda;
- y Naphtha;
- y Mineral turpentine;
- y Hexane;
- y Solvent;
- y Hydrated ethyl alcohol;
- y Biodiesel (B100);
- y Fuel oil;
- y Lubricant;
- y Petroleum;
- y Diesel.

### APPLICATION

#### MIX

1. Homogenize the content of each Part (A and B) separately using mechanical agitation or pneumatic using a helical propeller coupled to a low speed mixer. Ensure that none sediment is retained at the bottom of the packages.
2. Add Part B to Part A, in the proportions (volume) indicated. Homogenize using low-speed mechanical or pneumatic agitation using a helical propeller coupled to the mixer to prevent the incorporation of air and obtain a homogeneous product. Avoid mixing for long periods.

3. Do not dilute or heat Parts A and B.

4. To clean tools and equipment, use EP solvent.

#### EQUIPMENT

- y Use 70:1 Airless, fluid pressure 3,500 - 4,500 psi.
- y Hose 1/2 inch in diameter.
- y Nozzle 0.025" to 0.033".
- y Conventional spray gun is not recommended.

The data serve as a guideline and can be used similar equipment.

## CLEANING THE EQUIPMENT AND TOOLS

Following the application, and before the resin cures, all equipment and tools that have come in contact with the glass flake should be cleaned with solvent EP. The hardened material not removed by solvent cleaning should be burned off.

## STORAGE

When stored in the unopened original containers at 25°C the shelf life of all Glass Flake materials is 12 months.

## SAFETY

### HEALTH AND SAFETY AT WORK

Avoid all contact with skin or eye. The environment during the application should be well ventilated to reduce inhalation of vapors. Workers should wear adequate breathing apparatus in confined spaces. Open flames, welding operations and any other spark inducing activity are not permitted near the work area. Smoking should not be allowed.

Some people are sensitive to contact with resins, catalysts and solvents. To avoid discomfort all workers should wear gloves and goggles at all time when there is a possibility of spillage or any other contact with these products. The use of protective creams is encouraged as added protection. Over sensitive personnel showing any sign of discomfort should be removed from the work area.

Resin spillage / drippings on the skin can be removed with soap and water. In case of contact with the eye, wash thoroughly for 15 minutes with clean water and get medical help. Medical assistance is required in case of accidental ingestion. Do not induce vomiting.

## ADDITIONAL INFORMATION

Oro produces and sells a large variety of products designed to protect steel or concrete substrates against corrosion. Our product line includes coatings and linings, special paints, and products used in surface treatment.

We also carry a complete line of auxiliary products like grouts, anchoring systems, carbon fibers and a complete system solution to the problem of the structural rehabilitation of steel or concrete structures.

Please call us for further information about our products, tutorial videos and technical brochures.



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