WINGARD – CGFE

NANO COMPOSITE GLASS FLAKE EPOXY COATING

WPT

PRODUCTS DESCRIPTION:

WINGARD-CGFE, Nano Composite High Performance Epoxy based specially formulated two component coating system incorporated with specifically treated surface tolerant glass flakes reinforcement, which offers excellent chemical, abrasion and corrosion resistance, due to adverse effect of wide range of chemicals, gases, and weather conditions. It exhibits excellent abrasion and impact resistance, which makes it ideal coating system for surface protection for metal and concrete structures continuously immersed in to water.

The coating is also induced with nano particles which enhances the surface roughness properties and reduces the frictional losses drastically.

PRODUCT APPLICATION AREAS:

Perfectly suitable protective and life enhancing coating for all types of metal and concrete structures continuously exposed to water and other mild chemicals in plants, machinery, above & below ground pipes lines, onshore & offshore platforms, tanks, vessels, valves, pumps and other structures subject to corrosion. It also offers excellent saline atmosphere resistance.

PRODUCT FEATURES:

- Excellent corrosion & chemical resistance.
- Designed as life enhancing coating for coastal and industrially polluted environment.
- High performance high build epoxy coating for protection of steel in aggressive conditions.
- Excellent resistance to moisture and saline conditions.
- Excellent resistance to water and splash of mild chemicals.
- Suitable for touching up of weld seams and damages to epoxy coatings during construction.

PRODUCTS SPECIFICATIONS:

Composition	: Two pack system designed as “BASE” and “HARDNER”
Mixing Ratio	: BASE 3 : HARDNER 1
Maturation Time	: Pot Life : 1 hour. Drying Time : Surface Dry – 3 Hrs. Hard Dry - 24 Hrs (Depends on the temperature, relative humidity etc)
DFT	: 200 to 400 micron per coat. Avg recommended DFT 200 micron per coat for long life.
Coverage	: 3 - 4 Sq. Mtrs @ avg 200 – 250 micron DFT. *
Application System	: Spray, Brush or Roller.

PERFORMANCE DATA:

Abrasion resistance	: Excellent
Adhesion	: Excellent
Flexibility	: Moderate
Impact resistance	: Excellent
Humidity Resistance	: Excellent

CHEMICAL RESISTANCE:

Water	: Excellent
Alkalis	: Excellent
Inorganic Acids	: Excellent
Organic Acids	: Excellent
Organic Solvents	: Excellent

DESCRIPTION OF TEST RESULTS :

Properties	Parameters/ Standards	Test Results
Adhesion	ASTM D 3359 Cross Cut Tape test	Passed 5A, 5B
Impact Resistance	ASTM D 2794 Gardiner Impact, 7 Day AirDry @25°C	Excellent
Flexibility	ASTM D 522 Conical Mandrel Apparatus	Good
Exterior Durability	ASTM G 53 Accelerated aging via exposure to Fluorescent Ultraviolet and Condensation	No Effect
Salt Fog Resistance	ASTM B 117 Salt Spray Test 500hrs	No Effect
Hardness Test (Shore Di)	ASTM D2240 2015	82

SURFACE PREPARETION:
The surface to be coated must be dimensionally stable, dry, clean and free of oil, grease, release agents, curing compounds and other foreign materials.

For Steel Surface: All surfaces shall be free of loose rust, mill scale and contaminants such as oil, grease, dirt and salts. Before any surface preparation is attempted, oil and grease must be removed by employing SSPC-SP1 solvent cleaning. Use commercial Blast cleaning to SA 2 ½ grade SIS 05 -5900 to remove mill scale, rust and other contaminants and leave a roughened surface.

For Concrete Surface: Ensure perfect curing of concrete surface. measure moisture content of and ensure below 5 % . force drying not recommended. Ensure surface free of all types on loose layers particles, defects , damages and any other contaminations.

OVERCOATING TIME PERIOD: Subsequent coats should be applied just before touch dry. Maximum over coating period would be 4-5 days after previous.

SHADES AVAILABLE: Industrial Grays, Green, Blues and Other limited specific shades as per requirements.

CLEANING OF TOOLS
Tools and equipment contaminated with liquid can be cleaned with Thinner GF. Cleaning should be done before it starts to gel or harden.

SAFETY AND HANDLING
Use gloves, goggles and barrier cream. Avoid contact with skin. Ensure adequate ventilation during application. For further detail, refer to Material Safety Data Sheet.

STORAGE AND SELF LIFE
Winson Polymer Technology. products should be stored in well ventilated place. The area of storage shall be covered protecting the material from direct sunlight. The shelf life of these products shall be one year from the date of manufacture in sealed unopened container.

NOTE
The recommendations, test results and suggestions are offered herein as a guide in the use of these materials and are not a guarantee to their performance in as much as Winson Polymer Technology , has no control over the use to which others may put the product. The mentioned properties are typical values and are not intended for specification use.

TECHNICAL SUPPORT
Technical information and guidance regarding WINSON range of products will be available from the technical services department, of WINSON POLYMER TECHNOLOGY.WINSON range of products undergoes high standard quality checks and every reasonable precaution is taken in the manufacture of all products. WINSON continuously strive to ensure the products, recommendations, specifications & information given is reliable, correct and accurate. No specific guarantee can be assured as product performance depends not only on quality but also on many other factors which are not under our control. The customer should make his own trials to determine the compatibility of the product for his own purpose. All products are sold subject to our standard terms and conditions of sale.