GROUPE | Surface materials engineering

ROMAX 78

ROMAX™ POLYMER COATING Organic coating for technical or decorative use

Characteristics (depending on type of coating):

- Corrosion protection
- High resistivity (electrical insulation)
- Low resistivity (EMI shielding)
- Accepts friction
- Variety of colours

Note: Polymer coatings may be classified in two main categories:

- Liquid coatings
- Powder coatings (fluidized bed, electrostatic spraying, etc.)

Materials suitable for treatment: all types of substrates.

Examples of use: • Industrial fans • Industrial cabinets and enclosures • Generators • Engine casings • Screw heads • Submarine and ship parts • Tunnel equipment parts • Electronic covers • Various screws • Bodywork • Bus bars

Description

Heat-hardening powder with a smooth high-gloss surface finish, formulated from an epoxy resin, heavy metal-free pigments, and a functional filler. The special formulation provides a highly dielectric paint film.

Area of use

The product is particularly suitable for coating all substrates that come into contact with aggressive chemicals and solvents. The product is specially formulated to give the paint film electrical insulation properties and high chemical resistance.

Surface's preparation

It is essential to prepare the surface of the part before application. Preparation can be mechanical (sandblasting, sanding) and/or chemical (degreasing, strip-cleaning). The anti-corrosion properties, adhesion, and durability depend on the effectiveness of the chosen preparation. It is up to the user to decide on the most suitable preparation method.

Application

The application can be manual or automatic. The granulometry of the powder is particularly suitable for dip application (fluidized bed). In the event of recycling, add new powder automatically. Maximum 5% recycled powder.

Polymerization times

Polymerization times depend not only on the product's reactivity but also on the efficiency of the oven and the weight of the objects to be painted. The recommended firing settings are :

Time (minutes)	Temperature (°C)
20	180
10	200

The firing must be adjusted to the desired quality requirements and the result envisaged. The parameters indicated are those of the object.

Technical features		
Apparent powder density [g/cm3]	0.55	0.75
Thickness [µm]	65	130
Theoretical yield [m2/kg]	7.1	9.5
Granulometry [µm]	20	140
Gloss [UB @ 60°]	≥ 65	

Mechanical properties

Cylindrical Mandrel Bend [mm]	6
Erichsen Cupping [mm]	4
Adhesion	GT0

Data obtained on UNI 5961 specimens, thickness 0.5 mm, sandblasted. Thickness of film applied approx. 100 microns.

Safety

Powder paints are combustible but not flammable. The ignition temperature of the powder/air ratio during application is between 450 and 600°C. For further information, please consult the safety data sheet drawn up in accordance with current standards.



Anti-corrosion base	Epoxy resin
Color	Brown
Substrates	Steel, aluminum, copper
Mode of application	Spraying
Polymerization	20min at 180°C or 10min at 200°C
Standard thickness	65 to 130μm
Features / properties	 Very good electrical insulator Excellent resistance to corrosion
Areas of use / Examples of use	 Radiators, deflectors, bars