

# ECCOSORB® Coating 300

## Two Part Polyurethane Coating

### Material Characteristics

- Two-Part polyurethane coating that is heavily loaded with iron to provide its absorbing characteristics
- It is a thixotropic coating that can be brushed on or sprayed on using common spray equipment
- Replaces the discontinued Coating 269E

### Applications

- ECCOSORB® Coating 300 is designed to reduce the radar cross section of objects, to reduce false echo or ghost images on ship radar, and to attenuate surface currents that are generated by radiation impinging on metal surfaces.
- ECCOSORB® Coating 300 is designed for use on compound surfaces where flat sheet elastomer or foam absorbers are not desirable.
- To operate as a specular absorber such that resonant absorption at a particular frequency is obtained, it is necessary for the ECCOSORB® Coating 300 to be bonded to a metal surface. The overall thickness of the coating is critical to performance as a specular absorber.

### Shipping & Availability

- ECCOSORB® Coating 300 is available in 2 pound (quart) containers and 8 pound (gallon) containers.
- Both Part A and Part B ship as a hazardous material. Part A ships as a Class 3 Flammable, UN 1993, PG III, and Part B ship as a Class 8 Corrosive, UN2735, PG II.

### Thickness Note

- ECCOSORB® Coating 300 is applied in thin layers until the correct thickness is obtained. Correct thickness is determined on a case-by-case situation depending on application and frequency of operation.

### Instructions for Use

- The system has to be applied in dry conditions
- Make sure that the surface to be coated is clean and free of oil and dusts
- The temperature should be higher than 15 °C during application and curing
- Thoroughly mix the paint until homogeneous
- Add the catalyst in the correct weight ratio, *see Typical Properties Table below*
- Pot Life is 2 hours
- It is recommended to build up the total thickness of the coating in steps of 100 - 150 µm with flash times of one hour between steps. The total layer should be cured for 24 hours minimum at room temperature. For layers thicker than 500 µm, the curing steps should be 24 hours after each 500 µm layer.
- For slightly accelerated curing of the final thickness, 2 hours at 80 °C is recommended. Flash point between layer applications must be maintained to ensure that the solvent has evaporated.
- For thinning, small amount of MEK may be used. Extended flash points are required to evaporate solvent

### Typical Properties

Max. Service Temperature, °F (°C)	302 (150)
Frequency Range	1-18 GHz
Color	Dark Gray
Density	4.6 g/cc
Surface weight of 0.7 mm thick coating	3.22 kg/m <sup>2</sup>
Mix Ratio, Paint:Catalyst	100:1
Pot Life	2 hours
Recommended thickness of each coating	100 - 150 µm
Shelf Life	6 months