



DuPont Powder Coatings

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**Data Sheet**

## Flamulit<sup>®</sup> HTC 231-1

A DuPont thermoplastic powder coating

### Product

**Flamulit<sup>®</sup> HTC 231-1** is a polyolefin based coating powder specially developed for the inside coating of cylinder and fire extinguisher linings. It offers excellent long-term adhesion without a primer, stress crack resistance as well as chemical and water resistance. Another key advantage is its elasticity in a broad temperature range. **Flamulit<sup>®</sup> HTC 231-1** meets the performance criteria of EN3 and the corrosion effects of water and AFFF foam.

### Typical Application

**Flamulit<sup>®</sup> HTC 231-1** is suitable for the coating metal pieces in a very corrosive environment such as tanks, fire extinguisher and cylinder linings.

### Typical Coating Conditions

Recommended pre-treatment:

Alkaline degreasing followed by phosphating or passivation. As a minimum degreasing with vapour phase chlorinated solvents. For increase mechanical adhesion we recommend that parts are sand blasted.

Procedure for fluidised bed:

- preheat 240-260 °C
- film forming 3-20 seconds depending on application and metal thickness

*For more informations, see DuPont guidelines for Metal Coating procedures.*

### Results

Smooth and glossy coating appearance.

Coating thickness: > 250

### Characteristics

| General properties              | Units             | Methods     | Values |
|---------------------------------|-------------------|-------------|--------|
| Particle size                   | µm                | DIN 53734   | < 400  |
| Brittle point                   | °C                | DIN 53446   | .80    |
| Softening temperature (Vicat)   | °C                | ASTM D 1525 | 60     |
| Elongation at break             | %                 | DIN 53455   | 800    |
| Specific gravity of the coating | g/cm <sup>3</sup> | DIN 53479   | 0.935  |
| <b>Coating properties</b>       |                   |             |        |
| Hardness Shore D                |                   | DIN 53505   | 30     |
| Electric strength               | kV/mm             | DIN 53481   | > 20   |
| Erichsen static stamping        | mm                | ISO 1520    | 8      |
| <b>Chemical resistance</b>      |                   |             |        |
| Dilute acids                    | very good         |             |        |
| Dilute alkalis                  | very good         |             |        |
| Solvents                        | good              |             |        |
| Mineral salt solutions          | very good         |             |        |

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For Safety, Health, storage and handling recommendations as well as the disclaimer information, see the DuPont Metal Coating general guideline.