

Thermographic paint for low temperature applications



Yield of paint 0.5 m²

Special thermographic spray paint with high emissivity and mechanical resistance for low temperature applications up to 100 °C. The precisely defined dependence of the emissivity on the wavelength and the viewing angle of the infrared camera enables to achieve very precise results of thermographic measurements.

Optical properties

High emissivity

- use effective emissivity for non-contact surface temperature measurement using infrared camera for correct angle of measurement
- effective emissivity mentioned below is valid for infrared cameras operating in the wavelength range of 7.5 – 13 μm (commonly used infrared cameras)

Low transmissivity

- band transmissivity up to 1.5 % for the wavelength band 7.5 – 13 μm (commonly used infrared cameras)

More parameters on the web:

- Spectral dependence of normal emissivity
- Spectral dependence of transmissivity

Table: Directional dependence of effective emissivity for band 7.5 – 13 μm

Angle (°)	5	10	20	30	40	45	50	60	70	80
Emissivity (-)	0.963	0.961	0.959	0.954	0.947	0.941	0.931	0.899	0.823	0.661

Other properties

Other properties

- coating thickness 30 μm (according to recommended application)
- coating roughness Ra = 0.8 μm, Rz = 9.6 μm
- electrical resistance 8.83*10¹⁵ Ω

High mechanical resistance

Thermal conductivity

- 0.75 W/mK (50 °C)
- 0.70 W/mK (100 °C)

Chemical composition

- acetone, n-butyl acetate, butane-1-ol, propane-2-ol

Instructions

1. Abrade the surface, clean it, dry it and get rid of grease. Cover other areas where spraying is not to be applied.
2. Shake the container for two minutes and make a test spray.
3. Spray slowly over the material from a distance of 25-30 cm. Apply four thin layers, wait for a while and apply four thin layers again.
4. Spray at temperatures 15-25°C. Paint hardening occurs after two hours.
5. After use, turn the container upside down and clean the valve by pressing for a few seconds.

Mechanical resistance



Optical properties guaranteed

up to 100 °C



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