



LabIR® Paint

Washable thermographic paint for special applications HEWP-LT-MWIR-BK-11

Washable thermographic spray paint with high emissivity for special applications at room temperature. The paint can be easily removed with water without the use of aggressive mechanical methods or chemical agents. Ideal for measurement of places where you can't use a permanent paint. Guaranteed physical properties and the dependence of emissivity on the wavelength and camera viewing angle allow you to achieve highly precise results of non-contact temperature measurement.

- **Colour:** black
- **Volume:** 400 ml
- **Yield of paint:** 0.5 m²

Properties

We can guarantee all mentioned thermographic paint properties only if you follow the instructions for using the paint that are introduced the website:

<https://paints.labir.eu/homepage/thermographic-washable-paint>

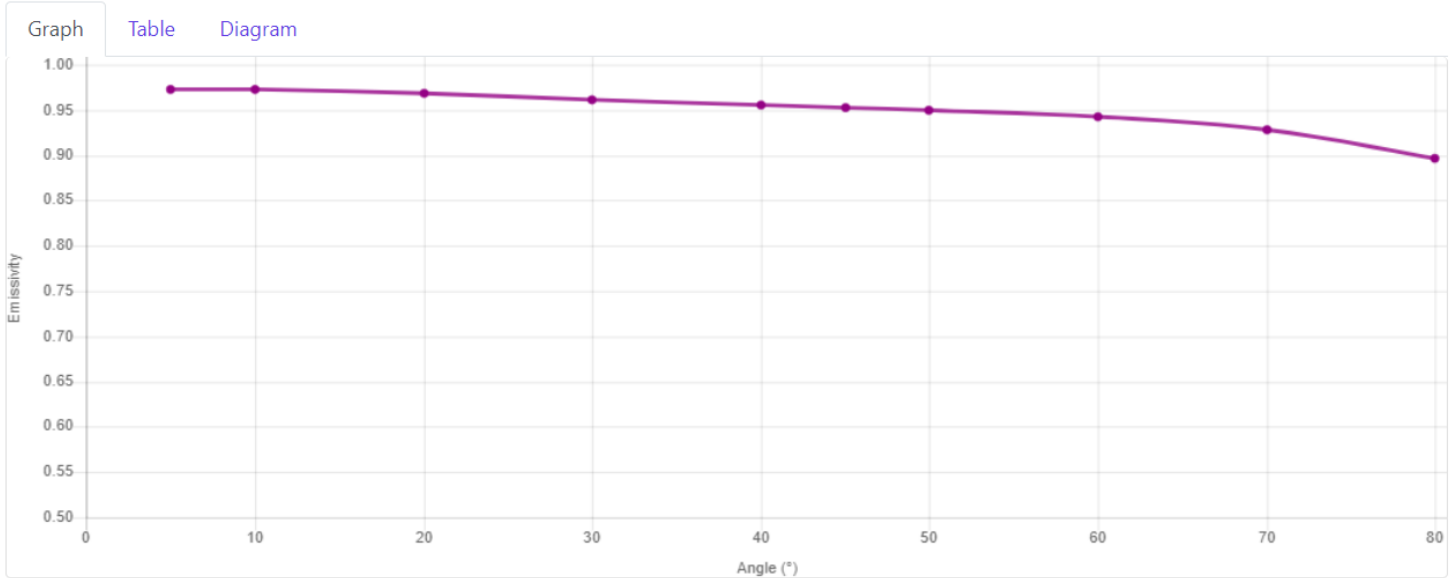
Optical properties – emissivity

- use effective emissivity for non-contact measurement of surface temperature using an infrared camera
- comply with effective emissivity for correct angle of measurement
- effective emissivity is valid for infrared cameras operating in the wavelength range 7.5 – 13 μm



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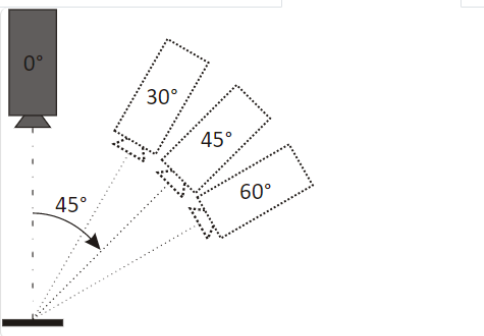
Directional dependence of effective emissivity for band 7.5 – 13 μm (resp. for infrared camera FLIR A615)



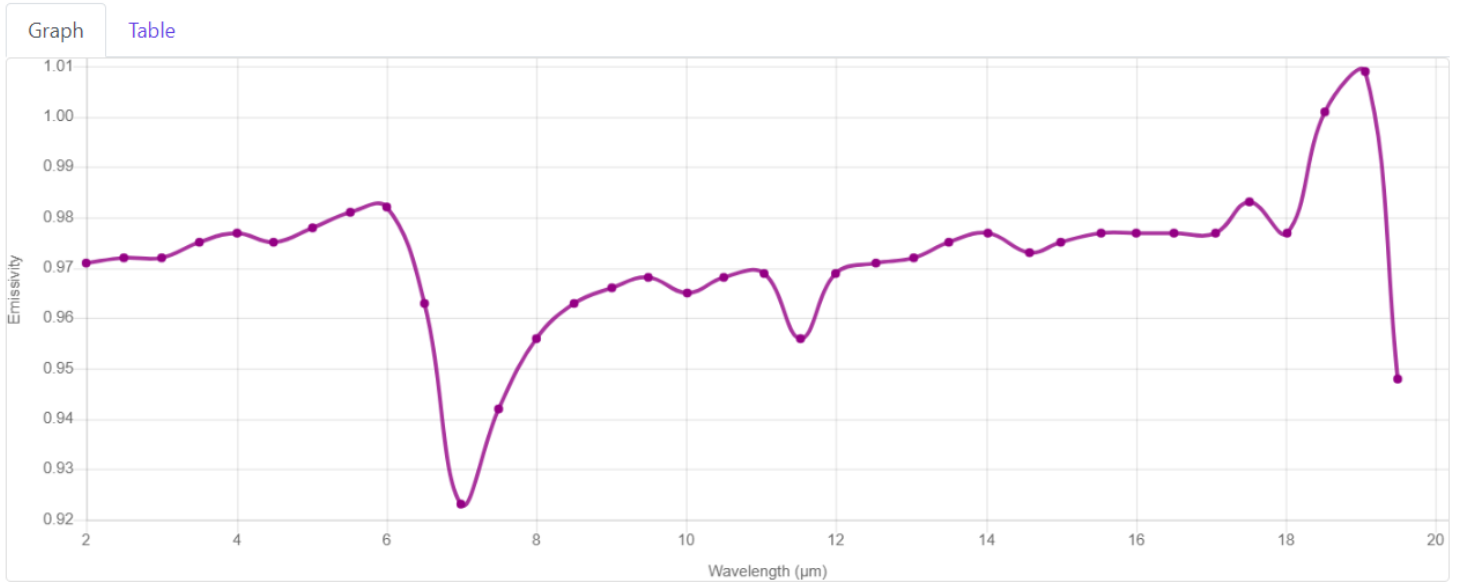
Graph Table Diagram

Angle (°)	Emissivity
5	0.973
10	0.973
20	0.968
30	0.961
40	0.956
45	0.953
50	0.949
60	0.943
70	0.928
80	0.897

Graph Table Diagram



Spectral dependence of normal emissivity



Graph Table

Wavelength(μm)	Emissivity
2.00	0.971
2.50	0.972
3.00	0.972
3.50	0.975
4.00	0.977
4.50	0.975
5.01	0.978
5.51	0.981
6.00	0.982
6.50	0.963
6.99	0.923
7.49	0.942
8.00	0.956
8.50	0.963
9.00	0.966
9.50	0.968
10.01	0.965
10.50	0.968
11.03	0.969



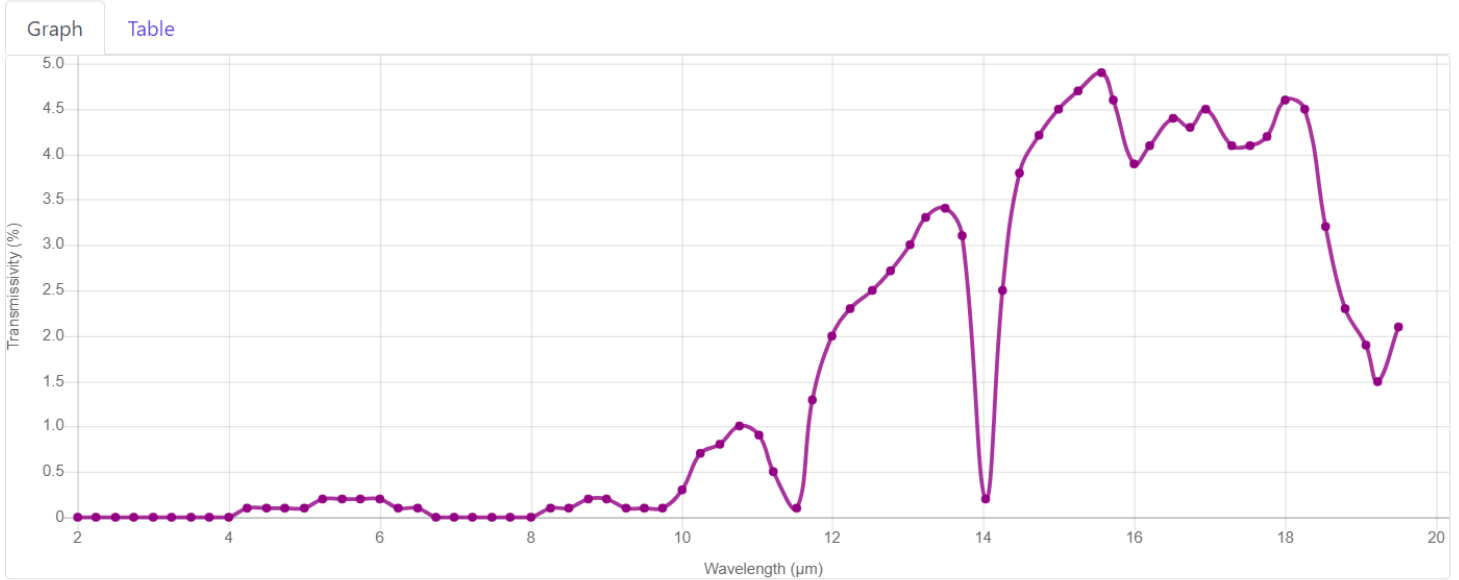
11.52	0.956
12.00	0.969
12.53	0.971
13.03	0.972
13.50	0.975
14.02	0.977
14.57	0.973
14.99	0.975
15.53	0.977
16.00	0.977
16.51	0.977
17.06	0.977
17.52	0.983
18.01	0.977
18.52	1.001
19.06	1.009
19.49	0.948



Optical properties – transmissivity

- band transmissivity up to 0.5 % in the wavelength band 7.5 – 13 μm (for commonly used infrared cameras)

Spectral dependence of transmissivity



Graph Table

Wavelength (μm)	Transmissivity (%)
2.00	0.0
2.25	0.0
2.50	0.0
2.75	0.0
3.00	0.0
3.25	0.0
3.50	0.0
3.75	0.0
4.00	0.0
4.25	0.1
4.50	0.1
4.75	0.1
5.00	0.1
5.25	0.2
5.51	0.2
5.75	0.2
6.00	0.2
6.25	0.1
6.51	0.1
6.75	0.0
6.99	0.0



7.24	0.0
7.49	0.0
7.74	0.0
8.00	0.0
8.26	0.1
8.50	0.1
8.76	0.2
9.00	0.2
9.26	0.1
9.50	0.1
9.75	0.1
10.01	0.3
10.25	0.7
10.50	0.8
10.76	1.0
11.03	0.9
11.22	0.5
11.52	0.1
11.73	1.3
12.00	2.0
12.23	2.3
12.53	2.5
12.77	2.7
13.03	3.0
13.23	3.3
13.50	3.4
13.72	3.1
14.02	0.2
14.25	2.5
14.48	3.8
14.73	4.2
14.99	4.5
15.25	4.7
15.56	4.9
15.71	4.6
16.00	3.9
16.20	4.1
16.51	4.4
16.73	4.3



16.95	4.5
17.29	4.1
17.52	4.1
17.76	4.2
18.00	4.6
18.26	4.5
18.52	3.2
18.79	2.3
19.06	1.9
19.21	1.5
19.49	2.1

Other properties

- coatings thickness 100 µm (according to recommended application)



Chemical composition

ethanol, diethyl ether, carbon black, titanium dioxide, xylene

Warning



Extremely flammable aerosol. Product container is under pressure. When it is heated, it can explode. It causes serious eye irritation. It may cause drowsiness and dizziness. Repeated exposure may cause skin dryness or cracking. If medical help is needed, keep handy product container or label. Keep out of the reach of children. Before using, be sure to read the information on the label. Do not breathe aerosol. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Pressure container: Do not pierce or burn even after use. Do not spray on an open flame or other ignition source. Protect from sunlight. Avoid temperatures exceeding 50 °C.