

ITOWARM LJ55 is an infrared radiant submicron powder in an aqueous emulsion, which absorbs and retains heat, thereby, producing thermal effects on natural and synthetic fibres, and their blends.

PROPERTIES

- **Appearance** : White emulsion
- **Ionic Character** : Anionic
- **pH** : Approx. 7
- **Solubility** : Disperses easily in cold water

APPLICATION

In Padding:

- **ITOWARM LJ55** : 30 - 40 g/l
- **ITOSILICONE LJ88** : 15 - 20 g/l
- **Drying** : 120°C for 1 - 2 min.
- **Curing** : 150°C for 1 min

N.B. When diluting the ITOWARM LJ55 should be mixed thoroughly beforehand and cold water should be used.

In Exhaustion:

- **Bath 1** : ITOFIX EZF 2%
- **Rinse**
- **Bath 2** : ITOWARM LJ55 5%
- **Bath 3** : ITOSILICONE LJ88 3%

For all baths use the following conditions

- **Liquor Ratio** : 20:1, at 40°C for 20 min.
- **Dehydrating and Drying** : 100°C
- **Curing** : 150°C for 1 min.

N.B Bath 3 is an optional finish to improve the handle

DISCLAIMER

The information herein offered is based on the best of our knowledge at present. However, we are not able to guarantee these matters, as the result of application may vary according to conditions adopted. Preliminary tests are, therefore, recommended in all cases. Please refer to MSDS regarding handling of the products.

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Test material : 100% acrylic gloves

Dipping ----- Hydroextraction ----- Drying
 40°C x 40 min pick-up 30% 80°C

Results

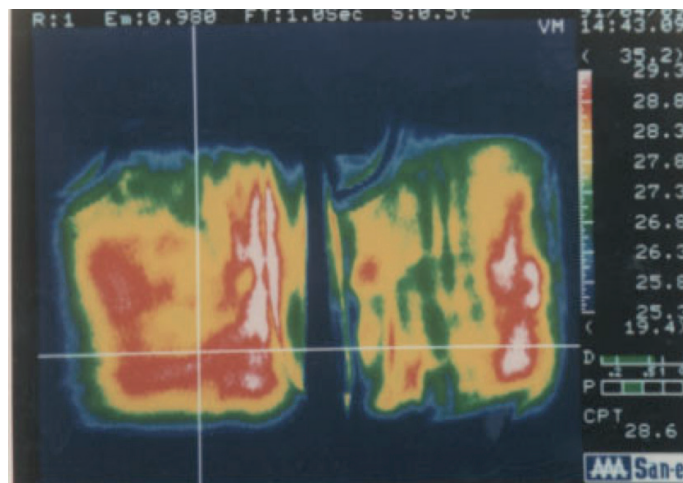
Measurement of heat picker value of infrared radiation strength

The gloves were treated in an oven at 80°C for 2 hours, then removed and placed in a conditioning room set at 25°C.

After 5 minutes, the heat picker value of infrared radiation strength (7-20 m) was measured.

Recipe		Heat Picker Value (W/sq.m)
Untreated		312
ITOWARM LJ55	10%	315
ITOWARM LJ55 SILICONE SOFTNER	10% 5%	316
SILICONE SOFTNER	5%	313

Thermal Imaging of Treated Fabric



White / Red = Retained Heat.

Darker Green / Blue = Cooler Sections.

Here we are illustrating the performance of ITOWARM LJ55 using an Infra Red camera, which is detecting a thermal image of a top. The left hand side of the top has been treated with the ITOWARM LJ55 and therefore showing larger sections of white/red areas then the right hand side of the top, which has been left untreated.