

Technical Literature F-01-03

Freon Resistance of AURUM[®] (1)

Given below are results of a Freon resistance test conducted on AURUM[®].

1. Test

Injection-molded articles of AURUM[®] natural resin (with and without annealing)

2. Testing Method

The Freon resistance of AURUM[®] was evaluated from changes in the appearance and weight of the samples after they were immersed in oil.

Grade	Conditions
Flon 113 (Freezer oil/Freon 113 = 10/1 (wt%))	165°C x 7 days
Flon 11 (Freezer oil/Freon 11 = 10/1 (wt%))	Ditto

3. Test Results

There was no change in either appearance or weight of the sample of the AURUM[®] natural resin with respect to its Freon resistance, regardless of whether or not it had been treated by annealing.

Weight before immersion: Weight immediately before drying at 200°C x 20 hrs

Weight after immersion: Weight after drying at 200°C x 20 hrs after attached oil was removed with a detergent and washed off with water.

The information contained herein is based on the information and data available at this moment, but none of the data or evaluation results contained herein provide any warranty whatsoever.

Freon Resistance of AURUM[®] (2)

1. Test

Injection-molded articles of AURUM[®] natural resin,
non-crystalline, tensile test specimens

2. Testing Method

The Freon resistance of AURUM[®] was evaluated from changes in the appearance and weight of the samples after they were immersed in oil.

Freon oil : Freezer oil/Freon = 10/1 (wt%)
Freezer oil: Kyoseki Freol F32
Freon: R-134A (CH₂FCF₃)
1,1,1,2-Tetrafluoroethane (available from
DuPont-Mitsui Fluorochemicals Co.)

Immersion conditions: 60°C x 100 hrs
Immersed in an autoclave

3. Test Results

	R-134A (60°C x 100 hrs)
Retention percentage:	
Tensile strength at yield point	110
Breaking strength	100
Tensile elasticity modulus	100
Tensile elongation at break	65
Change in weight	+0.2
Appearance	No change

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