

# resin

## Damisol® 3630 HTP / 600

- ▶ No VOC (Volatile organic compound)
- ▶ Low viscosity and High reactivity
- ▶ Suitable for a wide range of motors, generators and transformers.
- ▶ Can be processed on usual dipping, trickling, Roll-Dip and VPI equipment
- ▶ Outstanding thermal resistance up to (and more) than Class H - UL under progress- File E 98 511

### General description

Base : One component unsaturated polyesterimide resin with extremely low smell and without any VOC (Volatile organic compound) referring to the European legislation 1999/13/CE.

High reactivity and low viscosity resin. Suitable for any kind of process (trickling, roll dipping and dipping).

Permanent temperature properties for electrical insulation systems up to and including Class H.

UL Recognition File No. E 98 511 : Under test

### Application

Dipping, VPI, Trickling and Dip-Rolling of all kinds of windings, from any low voltage rotating machines and transformers.

This reference exists in different viscosity in order to suit exactly the customer process.

Due to its high thermal resistance, it could be used on any kind of electrical equipment exposed to high temperature conditions (tunnel fans,...)

### Processing

The Damisol 3630 HTP can be processed on any kind of dipping, VPI, trickling or Dip-Rolling machines, in immersion and vacuum or vacuum pressure installations.

Usual Curing process

- Trickling : 30 to 60 mn at 150°C (measured on copper),

- Dipping : 2 h at 150°C (usual oven temperature)

Higher temperature and longer curing time will optimize the chemical resistance as well as the mechanical properties.

The resin has to be protected from contamination. A regular viscosity check is therefore necessary.

Using the hot impregnating process the resin temperature should be maintained lower than 30°C and refreshed with new resin.

### Packaging

20 kg cans,

200 kg drums,

1000 kg Containers.

### Storage Conditions

Minimum 12 months at 23°C in sealed containers protected from light and sun.

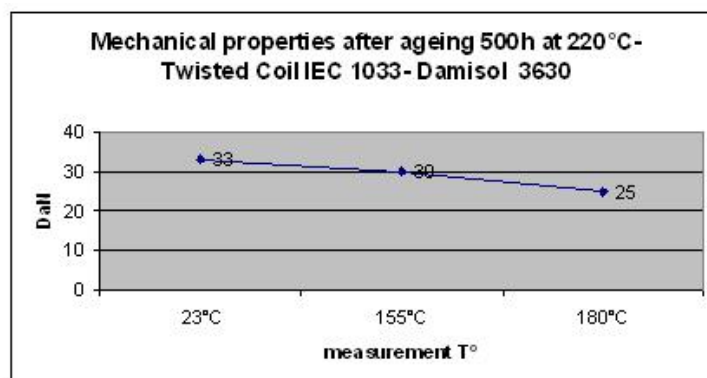
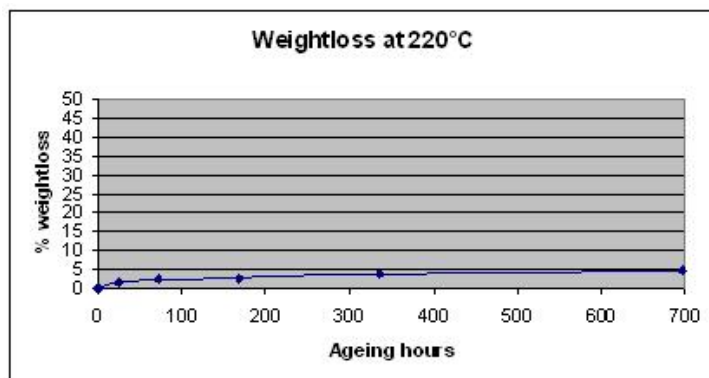
If storing the resin in a supply tank we recommend keeping the resin under atmospheric pressure. It is advantageous not to fill the supply tank completely. The recommended filling level is 70%.

### Health and safety

Refer to the Material Safety Data Sheet for complete information

		Value	Test norm
<b>Physical properties</b>			
Appearance		Transparent	
Density at 23°C	g/cm <sup>3</sup>	1.10	
Smell		Very Low	
Flash point	°C	≥110	
Gel time at 120° C	mn	2- 4	
Viscosity (Brookfield) at 23°C	mPa.s	600 ± 200	
<b>Mechanical properties</b>			
Bonding strength at 23°C	daN	25 ± 10%	IEC 1033
Bonding strength at 130°C	daN	10 ± 10%	IEC 1033
Bonding strength at 155°C	daN	8 ± 10%	IEC 1033
Bonding strength at 180°C	daN	6 ± 10%	IEC 1033
<b>Electrical properties</b>			
Dielectric strength - initial condition 50 % r.h at 23°C	kV/mm	≥150	DIN 46448
<b>Chemical properties</b>			
Water absorption after 24 h in water at 23°C	%	<0,2	ISO 62 (method 1)
Water absorption after 7 days in water at 23°C	%	<0,5	ISO 62 (method 1)
Resistance to liquid chemicals: HCl 10%	%	<0,7	ISO 175
Resistance to liquid chemicals : 2 % caustic soda solution	%	≤0,1	ISO 175

## Thermal Rating



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