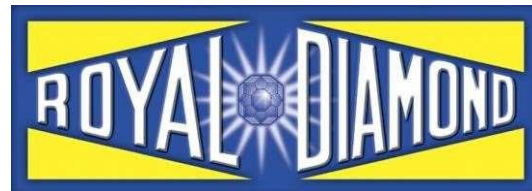


DIAPOL 788/200, one component thermal class N – 200°C



PRODUCT DESCRIPTION

DIAPOL 788/200 is a polyesterimide unsaturated resin for impregnation. The resin is presented in a one-component system ready to be used. DIAPOL 788/200 improves mechanical resistance according to temperature (200-220°C) due to its chemical nature. It is been studied for the impregnation of static and dynamic impregnation of materials in thermal class N (200°C). The resin has very good adherence to polyimide film and to glass fibber.

APPLICATION

Resin for impregnation of static and dynamic materials, where the N class is required.

HOW TO USE

The impregnation should be done by irrigation, immersion, vaccum or pressure. If you want to pre-heat the samples (40-60°C), we recommend to keep the temperature of the bath at 20°C maximum. A usual process could be 2-4h at 140°C with an extra cure at 180°C during 2h if the mechanical properties would like to improve (see binding power section). DIAPOL 788/200 must be storage in the original sealed containers, in a cool and fresh place, avoiding heating sources. This product must be used not later than 4 months after the manufacturing date. If the resin is storage in the tank, the temperature has to be stable and at 20°C room temperature, with a slow and continuous shaking. Annual consumption should be more than twice the storage amount of material.

CHARACTERISTICS

Chemical nature	Unsaturated polyesterimide
Thermal class	N (200°C)
Viscosity at 20°C Ford cup 4 (s)	40 ± 5
Density at 20°C (g/cm3).....	1.02
Color	Brown
Gel time at 80°C (min)	40-60
Glass Transition Temperature DSC (°C)	152

Properties of the cure resin (2 hours at 140°C)

- Dielectric strength (IEC 464-2):

Temperature 155°C (KV/mm)	130
Temperature 180°C (KV/mm)	115
Temperature 200°C (KV/mm)	95

- Volume resistivity (IEC 464-2):

Temperature 180°C (Ohm.cm)	>1011
Dissipation factor tg delta 50 Hz 10 Kv 23°C	0.006

- Binding power (NFT 26937):

Temperature 23°C (DaN)	26
Temperature 155°C (DaN)	10
Temperature 180°C (DaN)	6
Temperature 200°C (DaN)	5

- Vapours resistance of solvents over 7 days (IEC 15 C 187):

Acetone	No effect
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Bencene	No effect
White spirit	No effect
Methanol	No effect

PACKAGES

The product is available in 1kg, 5kg and 25kg packages.

Annex to Technical Data Sheet of DIAPOL 788-200

Due to DIAPOL 788/200 contains styrene (N° CEE 601-026-00-0) some precautions must be taken during the impregnation process. A brief summary of precautions are explained bellow:

1º Impregnation tank and the material which are in contact with the resin DIAPOL 788/200 must be of steel or galvanized sheet.

The resin should never be used on copper or its alloys.

These materials could cause soluble products which have damaging effects.

2º If the installation is VPI (Vacuum and pressure), an inert gas must be used to break vacuum or to give pressure like nitrogen.

Air and oxygen must never be used because explosive mixtures could be produced at high temperatures with vapors.

Explosion limit in % of air in volume:

Lower limit: 1.1 at 29.3°C

Upper limit: 6.1 at 65.2°C

3º Due to DIAPOL 788/200 reacts with temperature, the products are recommended to be storage at 10°C with slow and continuous shake. In that way and adding periodically fresh resin, the pot life of the resin could be unlimited. Annual consumption should be more than twice the storage amount of material.

If you have some doubts of the stability our quality of the product with time, the shipment of a sample to our laboratory is recommend testing the properties and quality.

4º Heat the resin is not recommend because it could affect to stability.