



TECHNICAL DATA

NP1853

HIGH TEMPERATURE CHEMICALLY RESISTANT

EPOXY RESIN SYSTEM

Product Description

NP1853 is a two-part epoxy resin system for high temperature applications. The flame retardant product exhibits a high glass transition temperature and excellent chemical resistance. The mixed resin cures at ambient and elevated temperatures and can be used in most types of mix and dispense machines.

Features

- * High Operating Temperature
- * Chemical Resistance
- * Ambient or Elevated Temperature Dispensing and Curing
- * Contains No Halogens and is Non-Toxic
- * Suitable for Machine Dispensing

Typical Uncured Physical Properties

Property	Base	Hardener	Mixed System
Viscosity (mPas)	60,000-100,000	2500	13,000
Colour	Beige	Clear Amber	Beige
Specific Gravity	1.69	1.00	1.57
Mix Ratio	7.8	1	By Weight
	4.6	1	By Volume

Pot Life	100 Minutes	150 g @ 23°C
Gel Time	5 Hours	150 g @ 23°C
Complete Cure	4 Hours	150 g @ 80°C
	2 Hours	150 g @ 120°C



Typical Cured Properties

Property	Result	Units
Operating Temperature	-40 to +180	°C Continuous (Application & Geometry Dependent)
Shore D Hardness	85	
Electric Strength	20	kV/mm
Comparative Tracking Index	>600	V
Volume Resistivity	10 ¹⁵	Ohm.cm
Thermal Conductivity	0.85	W/mK
Deflection Temperature	160	°C (Approx)
Flammability	Flame Retardant	
Water Absorption	0.1	% (30 days at 20°C)
Coefficient of Expansion	40	ppm/°C
Cure Shrinkage	0.3	% (volume)

Note: The above technical information and data should be considered representative or typical only and should not be used for specification purposes.

Supply	Details
Twinpacks	Ideal for mixing without the entrapment of air.
Kits	The resin base and hardener are supplied in two separate containers, pre-weighed to facilitate accurate mixing for larger applications.
Bulk	The NP1853 system is formulated to prevent sedimentation on storage. However, storage at higher ambient temperatures (above 25°C for instance) or for long times, can cause some settlement. It is important that any sediment is redispersed into the bulk resin prior to using the resin. This can be done by stirring with a long spatula.
Shelf Life	The materials should be stored in the original unopened containers under cool dry conditions at temperatures between 10 and 25°C. The shelf life is one year. Opened containers should be resealed.



Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. All Products should be used in accordance with your own COSHH Assessments. For additional health and safety information, call 01373 858234.

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that ALH believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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Version: 2
Date: August 2019