



ALH Systems Limited

1 Kingdom Avenue, Northacre Industrial Park, Westbury, Wiltshire BA13 4WE England
Telephone: Westbury (01373) 858234 Fax: (01373) 858235 email: sales@alh-systems.co.uk

TECHNICAL DATA SHEET

NP1173

WATER & SHOCK RESISTANT POLYURETHANE RESIN

Fully RoHS Compliant containing no heavy metals

Product Description

NP1173 is a two component polyurethane resin system forms an excellent water resistant barrier around encapsulated components. The thermal conductivity has been enhanced to dissipate heat from warm components. The flexibility protects components from physical and thermal shock. The system is used in explosion recording sonar devices.

Features

- * Outstanding Water Resistance
- * Flexible at Very Low Temperatures
- * Excellent Electrical Properties
- * Enhanced Thermal Conductivity
- * Limits Stress on Electrical Components

Typical Uncured Physical Properties

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

Property	Base	Hardener	Mixed System
Viscosity (mPas)	8000	400	1000
Colour	White	Clear Straw	White
Specific Gravity	1.76	0.94	1.65
Mix Ratio	12.4 6.65	1 1	By Weight By Volume

Pot Life	20 Minutes	200 gm @ 23°C
Gel Time	150 Minutes	200 gm @ 23°C
Complete Cure	72 Hours	200 gm @ 23°C

Typical Properties of the Cured Material

Operating Temperature	-60 to +100	°C Continuous
Shore A Hardness	25	After 72 hours
Electric Strength	15	kV/mm
Continuous Tracking Index	>850	V
Thermal Conductivity	0.8	W/m ⁰ K
Deflection Temperature	-50	°C (Approx)

Supply

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	Available in proportioned containers
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.

Product Use

Many factors beyond ALH's control and uniquely within user's knowledge and control can affect the use and performance of an ALH product in a particular application. Given the variety of factors that can affect the use and performance of an ALH product, the user is solely responsible for evaluating the ALH product and determining whether it is fit for a particular purpose and suitable for the user's methods of application.

Warranty, Limited Remedy and Disclaimer

Unless an additional warranty is specifically state on the applicable ALH product packaging or product literature, ALH warrants that each ALH product meets the applicable ALH product specification at the time ALH ships the product. ALH MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONIDTION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the ALH product does not conform to this warranty, then the sole and exclusive remedy is, at ALH's option, replacement of the ALH product or refund of the purchase price.

Limitation of Liability

Except where prohibited by law, ALH will not be liable for any loss or damage arising from the ALH product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

12/11/2012