

HumiSeal[®] 2E16 Unfilled Epoxy Encapsulation

Technical Data Sheet

HumiSeal[®] 2E16 is a transparent, room temperature curing, two-part epoxy-based system designed to encapsulate small to medium sized electronic packages. This product provides excellent moisture, chemical, and physical shock resistance properties, ideal for protection against harsh environments.

<u>Applications</u>	<u>Features</u>	<u>Substrates</u>
Electrical Encapsulation	Acrylate Free	Metals
Potting RF Transmitters	Moisture and Chemical Resistance	Nylon
	Room Temperature Cure	Polycarbonate
	Physical Shock Resistance	
	Low Shrinkage	

Properties of HumiSeal[®] 2E16

Uncured Property*	Value
Solvent Content	No Nonreactive Solvents
Chemical Class, PT A:B	Epoxy : Amine
Appearance, PT A:B	Clear with yellow tint : Clear with yellow tint
Specific Gravity PT A	0.95 – 1.05
Specific Gravity PT B	0.9 – 1.0
Viscosity @ 25C, PT A, cP	350 - 450
Viscosity @ 25C, PT B, cP	30 - 50
Mix Ratio by volume (mL), A:B	2 : 1
Cleanup Solvent	Isopropyl alcohol

Cured Properties*	Value
Durometer, Shore A	55 - 65
Compressive Modulus @ 23°C, MPa (Low Strain)	1.7 - 2.0
Compressive Modulus @ 23°C, MPa (High Strain)	7.5 - 8.5
Elongation, %	110 - 150
Water Absorption (wt %), (ASTM D-570)	<1
Glass Transition Temperature (Tg), C	20 - 25
CTE Below Tg, ppm/k	~100
CTE Above Tg, ppm/k	~225

*All values are approximation of expected results

Curing

HumiSeal[®] 2E16 is a ambiently cured two part epoxy potting material. The table below outlines the recommended cure schedule for HumiSeal[®] 2E16.

Cure Guidelines	
Gel Time @ RT (100 g), hours	4 - 5
Cure Time @ RT, hours	72 - 78

Application of HumiSeal[®] 2E16

HumiSeal[®] 2E16 can be successfully applied to substrates that have been cleaned prior to coating and also to substrates assembled with low residue, “no clean” materials. Users should perform adequate testing to confirm compatibility between the conformal coating and their particular assembly materials, process conditions and cleanliness level. Please contact HumiSeal for additional information.

Storage

HumiSeal[®] 2E16 Keep stored between 10°C and 28°C in tightly closed containers away from direct sunlight. Keep from freezing. Please refer to product labeling for shelf-life information. Consult SDS for safe handling recommendations.

Caution

Application of HumiSeal[®] Conformal Coatings should be carried out in accordance with local and National Health and Safety regulations.

Use only in well-ventilated areas to avoid inhalation of vapours or spray. Avoid contact with skin and eyes.

Consult SDS prior to use.

Contact HumiSeal[®]

HumiSeal North America

201 Zeta Drive
Pittsburgh, PA 15238
USA
Tel: +1 412-828-1500
Toll Free (US only): 866-828-5470
sales@humiseal.com

HumiSeal Technical Center

375 University Avenue
Westwood, MA 02090
USA
Tel: +1 781-332-0734
Fax: +1 781-332-0703
techsupport@humiseal.com

HumiSeal Europe

505 Eskdale Road, IQ Winnersh
Berkshire RG41 5TU
UK
Tel: +44 (0)1189 442 333
Fax: +44 (0)1189 335 799
europesales@chasecorp.com

HumiSeal India

J-154, M.I.D.C Bhosari
Pune 411 026
Maharashtra
India
Tel: +91 20 66308098
indiatechsupport@chasecorp.com

HumiSeal S.A.R.L

4/6 Avenue Eiffel
78420 Carrieres-Sur-Seine
France
Tel: +33 (0) 1 30 09 86 86
Fax: +33 (0) 1 30 09 86 87
humiseal.sarl@chasecorp.com

HumiSeal Asian Support

Tel: 852-9451-6434
Fax: 852-2413-6289
asiatechsupport@humiseal.com

HumiSeal Europe Support

Tel: +44 (0)1189 442 333
Fax: +44 (0)1189 335 799
europetechsupport@chasecorp.com

The information contained here is provided for product selection purposes only and is not to be considered specification or performance data. Under no circumstance will the seller be liable for any loss, damage, expense or incidental or consequential damage of any kind arising in connection with the use or inability to use its product. Specific conditions of sale and Chase's limited warranty are set out in detail in Chase Corporation Terms and Conditions of Sale. Those Terms and Conditions are the only source that contain Chase's limited warranty and other terms and conditions.