

Genable<sup>®</sup> Dispersions - Enabling the incorporation of graphene nanoplatelets into your formulation.

**PRODUCT DESCRIPTION** Thermally conductive resin paste system. Genable<sup>®</sup> 4300 is an A-GNP filled two-part epoxy system designed for use in thermal conductive applications, either directly as a paste gap filling system or as a potential base additive to other formulated systems. Use within formulations for bonding, potting, sealing and encapsulation for Space, Electronics and Automotive components.

- High thermal conductivity [ $>3 \text{ W}/(\text{m.K})$ ]
- Stable dispersion, free from agglomeration and sedimentation
- Easy application and mixing
- Good substrate adhesion and lap sheer properties
- Long shelf life – 12 months

<b>PRODUCT INFORMATION</b>	2 Part System	Part A: 4300R(Epoxy Resin) Part B: 4300H(Amine Hardener)
	Appearance	4300R: Dark Grey Paste 4300H: Clear Liquid
	Viscosity	4300R: Moderate Paste 4300H: 30mPa.s @20°C
	Mix Ratio (R:H)	100 : 14.6
	Standard Kit Size	4300R: 200g 4300H: 30g
	Density – Cured (g/ml)	1.30 – 1.40
	Curing Time (5°C to 25°C) (For alternative conditions, contact AGM)	4 Days
	Appearance (Cured)	Dark Grey
	Lap Shear Strength (MPa)	$>5.5$
	Thermal Conductivity (W/(m.K))	$>3$
	Shelf Life	12 Months

## DIRECTIONS OF USE

Weigh out the required amount of *Genable*<sup>®</sup> 4300R. *Genable*<sup>®</sup> 4300H should be added at 14.6 parts per 100 parts of *Genable*<sup>®</sup> 4300R and mixed thoroughly until there is no streaking apparent and the *Genable*<sup>®</sup> 4300H is fully incorporated to create a homogeneous paste.

NB. If is to be used as an additive to other material formulations, please contact AGM Technical Staff for further information as particle stability and mixing instructions may change.

## STORAGE

Store in ambient conditions for up to 12 months. Dispersion may show slight sedimentation during transportation or storage. User may need to re-agitate by mixing thoroughly with spatula, palette knife or mechanical stirrer before use.

Product should be stored at room temperature in the original containers kept tightly closed. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Keep container sealed until ready for use.

## SAFETY

Wear appropriate PPE. Use the minimum quantity of product required for a particular process. Use only in well-ventilated areas, preferably in an enclosed system. Provide appropriate exhaust ventilation at places where aerosols/dust may be formed. Handle and open container with care. Keep in the original container or an approved alternative made from a compatible material. Always close containers tightly after removal of the product. Empty containers retain product residue and can be hazardous. Do not re-use container. Dispose of materials in accordance with local regulations. Safety Data Sheet available on request.

*You will follow any instructions and all applicable guidelines, laws, regulations, government agency guidelines and best industry practice regarding the use, transport, security, and disposal of the products. All statements and technical information contained in this data sheet are given in good faith and are based on information believed to be reliable, but their accuracy and completeness are not guaranteed and no representation or warranty (express or implied) is given. Any statements and technical information do not constitute an offer to any person and do not form the basis of any contract. All products are sold subject to Applied Graphene Materials' standard terms and conditions of sale. The user will determine the suitability of the products for their intended use prior to purchase and will assume all risk and liability (to the fullest extent permitted under applicable law) in connection with that purchase and intended use. It is the responsibility of those wishing to sell items made from or using the products to inform other users of the properties of the products and the purposes for which they may be suitable, together with all precautionary measures required in handling those products. The information in this datasheet is under constant review and subject to ongoing modification, however, Applied Graphene Materials shall be under no obligation to notify the user of any modifications made.*