Thermally conductive resin paste system. **Genable 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 - >3W/(m.K)
- Stable dispersion, free from agglomeration and sedimentation
- Ease of application and mixing
- Very low density
- Good adhesion and lap shear properties
- Long shelf life – 12 months

**PRODUCT INFORMATION**

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<th>2 Pack Epoxy System</th>
<th>Part A: 4300R (Epoxy dispersion)</th>
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<td>Part B: 4300H (Amine Hardener)</td>
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**Appearance**

- Part A: 4300R: Dark grey paste
- Part B: 4300H: Clear liquid
- Cured System: Dark Grey

**Viscosity**

- Part A: 4300R: Mid-viscosity paste
- Part B: 4300H: 30mPas.s @ 20°C

**Mix Ratio**

- 100 (4300R) : 10.1 (4300H)

**Density - Cured (g/ml)**

- 1.30 – 1.40

**Curing Time (5°C to 25°C)**

- 4 days

**Lap Shear Strength (MPa)**

- >5.5

**Thermal Conductivity (W/(m.K))**

- >3

**Standard Sample Kit Size**

- Part A: 4300R: 250g
- Part B: 4300H: 25g

**Shelf-Life**

- 12 Months

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.
MIXING INSTRUCTIONS

Weigh out the required amount of Genable 4300R. Genable 4300H should be added at 0.1 parts per 100 parts of Genable 4300R and mixed thoroughly until the Genable 4300H is fully incorporated to create a homogeneous paste.

Note: If the Genable 4300 dispersion is to be used as an additive with other material formulations, please contact AGM Technical Staff for further information as particle stability and mixing instructions.

USAGE

Please stir well before use. The dispersion may develop slight sedimentation during transport or storage. If this is the case the dispersion can be recombined by mechanical mixing.

This dispersion is produced using AGM’s proprietary manufacturing processes. The product is optimised to be incorporated into industry systems under medium shear. Please ensure that following the addition of the dispersion the system is fully homogenised.

STORAGE

Store in accordance with local regulations. The product should be stored in the original container, at room temperature (ideally, >20°C), in a dry, well-ventilated location away from direct sunlight. Keep away from incompatible materials and food and drink. Keep the container tightly sealed.

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 the 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 the container. Dispose of materials in accordance with local regulations. Material Safety Data Sheet (MSDS) available on request.

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