

Advanced Materials

HYPOX® DA323

Reactive Toughener and flexibilizer

DATA SHEET

Dimer Acid-Toughened BADGE Adduct

Properties

HYPOX® DA323 is an adduct of a DGEBA resin and a dimer fatty acid. At room temperature the product is a semisolid that requires mild heating to assist flow or pumping. The introduction of the fatty acid to the DGEBA backbone yields a resin that will impart a degree of flexibility to cured epoxy formulations.

HYPOX® DA323 adduct is usually blended with other epoxy resins and/or diluents to improve thermal shock and impact resistance. Improvements in adhesion and peel strength will also be realized. These improvements occur with some sacrifice in heat resistance as exemplified by a lowering of Tg with increasing HYPOX® DA323 adduct concentration. The product is compatible with all standard epoxy resins and curing agents.

Applications

- Adhesives
- Encapsulants
- Potting
- Coatings
- Toughening of prepreg and composites

Key data

Specified key data

Epoxy Equivalent Weight (ASTM D1652-90)	600 – 725	[g/eq]
Viscosity at 52 °C (Brookfield ASTM D2196-05)	40 000 – 60 000	[mPa s]
Color, (Gardner, ASTM D1544-80)	<12	
Acid Value (ASTM D8045)	<0.1	

Specified key data are individually checked throughout and guaranteed.

Typical key data

Flash point (Pensky Martens, DIN 51758)	≥ 200	[°C]
Appearance	Clear	
Dimer acid content	45%	

Data which is described in this document as 'typical' is not analyzed on a regular basis and is given for information purposes only. Data values are not guaranteed or warranted unless if specifically mentioned.

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Storage	<p>HYPOX® DA323 should be stored in a dry place, preferably in the sealed original container, at temperatures between 2 and 40 °C. The product should not be stored exposed to direct sunlight.</p> <p>Keep away from food, drink and animal feeding stuff.</p>
Handling precautions	<p>HYPOX® DA323 is not a primary skin irritant or sensitizer. However, as with any epoxy material, irritation can result from repeated or prolonged contact. The symptoms of this irritation may appear as a mild reddening or a more pronounced rash. It is, therefore, important to avoid skin contact where possible. Butyl rubber gloves, full eye protection and protective clothing are recommended.</p> <p>Skin contact: Wash well with soap and water. Remove contaminated clothing and wash thoroughly before reusing. It is recommended that resin not be removed from skin with solvents since solvents increase contact and encourage penetration. Moreover, solvents of themselves dry and crack the skin.</p> <p>Eye contact: Flush immediately with large quantities of water. Contact a physician.</p> <p>Refer to the Safety Data Sheet on HYPOX® DA 323 for additional safety and health information. The SDS is revised as new data becomes available.</p>

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