

## Advanced Materials

# HYPOX® RA840#

### Reactive Toughener and flexibilizer

### DATA SHEET

#### CTBN-Toughened BADGE Adduct

#### Applications

HYPOX® RA840 is suggested for use as a toughener in fiber-reinforced products, adhesives, molding compounds, potting and encapsulating compounds and chemical-resistant coatings. HYPOX® RA840 adduct can be blended with epoxy to achieve the degree of toughening required.

- Molding compounds
- industrial Adhesives
- Impact resistance coatings
- Thermocycling modifier for epoxies
- Toughening of preregs, and composites and structural adhesives

#### Properties

HYPOX® RA840 is a high-viscosity adduct of the diglycidyl ether of bisphenol A (DGEBA) and a butadiene-acrylonitrile (CTBN) elastomer. The elastomer improves the toughness and impact, thermal shock and peel resistance of the epoxy formulation. These improvements are attained with little loss of thermal resistance and modulus. HYPOX® RA840 is compatible with all standard bis-A epoxy resins and curing agents.

#### Key data

##### Specified key data

Epoxy Equivalent Weight (Titration)	325 – 360	[g/eq]
Viscosity at 25 °C (Brookfield)	150 000 – 230 000	[mPa s]
Color, (Gardner)	<10	
Acid Value	<0.1	

Specified key data are individually checked throughout and guaranteed.

##### Typical key data

Flash point (Pensky Martens, DIN 51758)	≥ 200	[°C]
Appearance	Clear	
CTBN content	40% Hypo 1300X8	

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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<b>Storage</b>	<p>HYPOX® RA840 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>
<b>Handling precautions</b>	<p>HYPOX® RA840 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® RA840 for additional safety and health information. The SDS is revised as new data becomes available.</p>

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