

Araldite® EPN 1179[#]**Very high viscous, polyfunctional phenol novolak glycidyl ether****Applications**

For special applications and for coatings.

For coatings as follows:

- Alone for low-solvent and solvent-free coatings.
- Combined with liquid bisphenol-A epoxy resins for solvent-free coatings.

Suitable Aradur are polyamines or their adducts.

Properties

Araldite EPN 1179 (previous designation: Araldite GY 1179) is a polyfunctional resin characterized by high reactivity and high cross-linking density after cure.

Cure at ambient temperature gives adequate film properties, but post-cure at 40 to 60 °C increases cross-linking and consequently improves resistance to chemicals and temperature. Cured coatings show:

- very good resistance to inorganic and organic acids
- outstanding resistance to alkalis and to organic solvents
- good resistance to hot water.

Araldite EPN 1179 is suitable for coatings coming into contact with foodstuffs.

Key data**Specified key data**

Aspect (visual)	clear liquid	
Colour (Gardner, ISO 4630)	≤ 3	
Epoxy index (ISO 3001)	5.60 - 5.80	[eq/kg]
Epoxy equivalent (ISO 3001)	172 - 179	[g/eq]
Chlorine content, hydrolyzable (ISO 4583)	≤ 0.15	[%]
Viscosity at 52 °C (Falling-ball, ISO 12058-1)	1100 - 1700	[mPa s]

Specified key data are individually checked throughout and guaranteed.

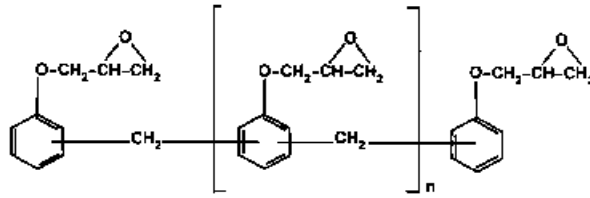
Typical key data

Vapour pressure at 20 °C (balance)	≤ 0.01	[Pa]
Density at 25 °C (ISO 8130-3)	1.22	[g/cm ³]
Flash point (ISO 2592)	≥ 200	[°C]

As-supplied form	very high viscous liquid
Odour	none
Shelf life (at storage temperature between 2 - 40 °C) (see expiry date on original container)	several years
Hazardous decomposition products (when disposed of in fire)	carbon monoxide, carbon dioxide, nitrogen oxides and other toxic gases and vapours
Disposal	regular procedures approved by local authorities

Typical key data are spot checked; the values are typical for the product and are indicated for information only. The values are not guaranteed.

[#] In addition to the brand name product denomination may show different appendices, which allows us to differentiate between our production sites: e.g. BD = Germany, US = United States, IN = India, CI = China, etc. These appendices are in use on packaging, transport and invoicing documents. Generally the same specifications apply for all versions. Please address any additional need for clarification to the appropriate Huntsman contact.

Theoretical formula

Average value of n = 0.2; Epoxy functionality = 2.8

Viscosity

Approximative viscosity (ISO 12058-1) of Araldite EPN 1179 as a function of temperature:

Temperature	[°C]	25	30	35	40	45
Viscosity	[mPa s]	80000	36000	17000	7000	3500

Compatibility and dilution

Araldite EPN 1179 is compatible with modified and unmodified bisphenol-A epoxy resins, with aliphatic and aromatic reactive diluents and with polyamines and their adducts. Compatibility with polyamidoamines is limited.

Mix ratios

Components	Parts by weight					
Araldite EPN 1179	100	100	100	100	100	
Aradur 830 / 850 (3:1)	65	-	-	-	-	
Aradur 837	-	40	-	-	-	
Aradur 943	-	-	23	-	-	
Aradur 2964	-	-	-	50	-	
Aradur 2969	-	-	-	-	65	
Viscosity at 25 °C (ISO 9371B)	[mPa s]	26000	27000	70000	2000	6000
Gel time (Tecam, 100 ml, 20 °C, 65% RH)	[min]	130	20	10	40	120

Storage

Araldite EPN 1179 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.

Handling precautions

Mandatory and recommended industrial hygiene procedures should be followed whenever our products are being handled and processed. For additional information please consult the corresponding product safety data sheets and the brochure "Hygienic precautions for handling plastics products".

Note

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