

# POLARIS

## R1A Epoxy Resin

**Description** R1A is a bisphenol-A liquid epoxy resin modified with reactive diluent. This resin offers lower viscosity & lower surface tension. Both these properties are advantageous while formulating. The low viscosity improves the cost effectiveness by increasing filler loading & the low surface tension improves adhesion by better substrate wetting, it also helps in better pigment wetting and thereby improve the pigment dispersion and stability.

A wide variety of curing agents are available to cure this liquid epoxy resin at ambient conditions and also at elevated temperature. Sometimes systems based on this grade are post cured to improve certain characteristics such as glass transition temperature and chemical resistance.

### Applications

- Self levelling floorings
- Trowable mortars and grouts
- High solids and solvent free coatings
- Other construction applications
- Adhesives

### Specification

Appearance	Visual	Clear liquid
Colour	ASTM D 1544-04	0.5 G Max.
Epoxy Equivalent Weight	ASTM D 1652-04	195 - 210 g/eq
Viscosity @25°C	ASTM D 2196-05	600 - 900 cP

### Typical properties \*

Epoxide Value	ASTM D 1652-04	4.76 – 5.13
Density @25°C	ASTM D 4052	1.10 g/ml
Moisture content	ASTM E 203	0.1 % max.
Non-volatile content	TEC-AS-P-012	100 %
Flash point	ASTM D 93	142°C

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**Packing** R1A is packed and delivered in steel drums, 220 kg per drum as a standard pack. Other packs are available upon request.

**Storage** R1A resin should be stored in original tightly closed container, in dry and warm conditions to avoid crystallization. Under these conditions, it has a storage life of at least two years from the date of manufacturing. R1A may become hazy or crystallize upon long storage especially when exposed to low temperatures. The resin can be restored to its original condition by warming to 55-60°C while stirring. For handling or pumping the maximum temperature recommended is 80°C.

**Handling** For more instructions on storage and handling of R1A please refer to the MSDS of the product.