錦湖피앤비化學株式會社
KUMHO P&B CHEMICALS, INC.

KER 1009

KER epoxy resins	*DATA SHEET*

Description

KER 1009 is a solid epoxy resin produced from bisphenol A and epichlorohydrin. The resin is also available in solution.

Applications

The principal use for KER 1009 is in the manufacture of epoxy-phenolic and epoxy-amino stoving paint systems. These are employed mainly as can coatings but also as linings for tubes and drums, and as high-performance and chemically-resistant finishes. In these systems KER1009 offers higher film flexibility than KER 3007K (but KER 1009 gives higher solution viscosities and a lower range of compatibility with other resins).

The high hydroxyl content of KER 1009 enables this resin to be used for the preparation of 2-component paints, using a polysocyanate as curing agent at room temperature.

Sales specifications

Property	Test method	Unit	Value
Epoxy group content (Epoxy molar mass*)	ASTM D1652	mmol/kg (g/eq)	260～440 (2273～3846)
Viscosity at 25℃**	ASTM D445	mPa.s***	100~280
Color**	ASTM D1209	Pt/Co scale	100 max

* grams of resin containing 1 g-equivalent of epoxide. (WPE, Weight per equivalent, is an alternative term).

** 40% (m/m) solution in methyl ethyl ketone, prepared according to SMS 1595

*** 1 mPa.s =1 cpoise

Typical properties

Property	Test method	Unit	Value
Density at 25℃	ASTM D792	kg/L	1.20
Glass transition temp. (Tg)	ASTM D3418	℃	80
Melting range		℃	120～147
Esterifiable group content	SMS 2367	mmol/kg	4480
Hydroxyl group content	SMS 2367	mmolOH/kg	3800
Molar mass (approx. Mn)			4000
Flash point (PMCC)	ASTM D93	℃	>200

Test methods

ASTM Standards are published by the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, USA.

SMS methods mentioned are available from Shell International Chemicals B.V., Shell Research and Technology centre, Amsterdam.

Storage

KER 1009 should be stored in cool, dry conditions, away from sources of heat. preferably in the original containers kept tightly closed. Under these conditions and at normal temperatures the storage life should be at least one year.

Handling precautions

Reference must be made to the Material Safety Data Sheer for this product.