



## I. Introduction

E-51 epoxy resin products have high epoxy value, low viscosity and light color. They are widely used as adhesives, solvent-free coatings, self-leveling floor materials and castables.

Counterparts Models: China 618, US, Korea, Shell-828, Mitsui Chemicals R-140, Dow Chemical DER331, Yueyang Petrochemical CYD-128, Guangzhou Hongchang GELR-128, South Korea LG Chem LER850, Epalloy 7190 Series South Korea (State capital) YD-128

## 2 Features

### Epoxy Resin E-51 Product Analysis

外观 Appearance	无明显机械杂质 no visible mechanical impurity
环氧值 (eq/100g) Epoxide Value	0.48—0.54
无机氯值 (eq/100g) Unhydrolytic Chlorine	$\leq 1 \times 10^{-3}$
挥发物 (%) Volatile	$\leq 2$
有机氯值 (eq/100g) Hydrolytic Chlorine	$\leq 2 \times 10^{-2}$
色泽 号 Colour	$\leq 2$
粘度 40°C (mPa.S) Viscosity	$\leq 2500$

## 3 Storage, transportation and precautions

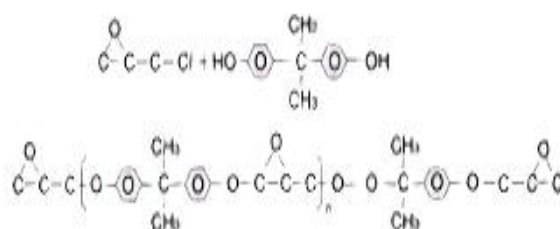
Such products are non-dangerous goods, which are stored and transported as general chemicals. See the packaging barrels for the product storage period.

## 4 packaging specifications:

220KG/barrel or 20KG/barrel

## Bisphenol A epoxy resin quality indicators

	外 观	环 氧 值(当 量/100克)	有 机 氯 值(当 量/100克)	无 机 氯 值(当 量/100克)	粘 度 (Pa·s, 40℃)	软化点(℃)	色 泽(号)	挥发份(%)
E-51 (618)	浅黄至无色 透明粘稠液 体	0.48-0.54	≤0.02	≤0.001	≤2.5	—	≤2	≤2
E-44 (6101)		0.41-0.47	≤0.02	≤0.001	—	12-20	≤3	≤1
E-42 (634)		0.38-0.45	≤0.02	≤0.001	—	21-27	≤3	≤1
E-20 (601)		0.18-0.22	≤0.02	≤0.001	—	64-76	≤5	≤1
E-12 (604)		0.09-0.14	≤0.02	≤0.001	—	85-95	≤5	≤1
E-03 (609)	浅黄至无色 透明固体	0.025- 0.042	—	—	—	135-145	≤3	≤



The epoxy resin is a hot solid resin. When the main agent and the hardener are properly mixed in a certain ratio and hardened by cross-linking, a three-dimensional network structure is formed, thereby imparting special physical properties, mechanical properties and chemical resistance to the product. Character and so on.

The epoxy resin main agent is generally based on epichlorohydrin or bisphenol A (or its equivalent derivative). After proper reaction polymerization, epoxy resin main agent products of various molecular weights can be obtained.

The main reactions are as follows:

When  $n = 0$ , the molecular weight is 340 g/mole, and when  $n = 10$ , the molecular weight is 3000 g/mole, and the molecular weight is determined by  $n$ .

In general, the following six properties can be used as the basis for selecting epoxy resins:

- 1 Viscosity Average molecular weight and its distribution
- 2 Epoxy equivalent Softening Point
- 3 Hydrogen and oxygen equivalents Heat distortion temperature after cross-linking

If you match the user's operating requirements, with appropriate hardeners and accelerators, you can get the ideal epoxy resin products.