

Sub:Disposal of Medium Viscosity grade VPI Epoxy Resin/Hardner mix (MHHP) scrap.

HEEP, BHEL will be selling off openly Medium Viscosity grade VPI Epoxy Resin / Hardner mix (MHHP) scrap to any buyer, who is in need of this scrap, @ Rs. 75.00 per Kg.+ Applicable Taxes. Approximate quantity of this scrap for this year will be 50 MT.

If you are interested to buy this scrap, you may contact Disposal Store of CSX department. Phone no. 01334-285857, 01334-284176. You have to follow general terms & conditions of disposal of scrap.

(A.K.Mathur)
AGM (CENTRAL PLANT STORES)
HEEP, BHEL; HARIDWAR



BHEL HARDWAR

Technical Information

Single Component Epoxy Resin System, Grade MV

This material consists of a mixture of Bisphenol- A -Epoxy resin and Di -carboxylic Anhydride hardener. This is a hot curing resin system and exhibits a varying pot life depending upon the type and quantity of catalyst employed.

In combination with a suitable flexibilizer (like DY 040 of M/s Ciba Speciality Chemical, Mumbai) and tertiary amine catalyst (Dimethyl benzylamine), this material is a versatile resin system for many electrical and fiber reinforced structures applications.

SALIENT FEATURES

- Multi purpose system for impregnation and casting.
- Ability to be processed by a large number of different techniques.
- Absence of volatile by products and negligible shrinkage and hence high degree of dimensional stability.
- Good electrical properties.
- Good wettability for glass fibers.
- Good tracking resistance.
- Good thermal properties.
- Good chemical resistance.
- Low viscosity material permits easy flow and good penetration.

TECHNICAL DATA :

Colour :	Clear pale yellow liquid
Density at $25 \pm 2^\circ\text{C}$:	1.15 ± 0.02
Viscosity at $25^\circ\text{C} \pm 2^\circ\text{C}$:	600 – 1200 cP
Viscosity at $70^\circ\text{C} \pm 2^\circ\text{C}$:	≤ 100 cP
Saponification No. :	≤ 364 mg KOH/g
Acid No. :	≤ 364 mg KOH/g
Pot life :	Varying long pot life at $25 \pm 2^\circ\text{C}$ depending upon the type and quantity of catalyst employed.

PROCESSING :

The material can be processed by a number of techniques and using various curing cycles depending upon the type and quantity of catalyst employed. The optimum compositions and processing regimes can be arrived by experimentation to suit a particular application.

APPLICATION AREAS:

The low viscosity of the materials facilitate thorough impregnation and allow higher filler loading and hence this material is considered most appropriate for the following applications :

1. *Potting and Encapsulation* :- The material can be used with / without fillers for potting and encapsulation of post insulators, dry type transformer, bushings, components / parts of switch gear assemblies magnet coils, transducer, capacitors etc.●
2. *Filament winding* :- The low viscosity of the material at room temperature or processing temperature provides excellent fiber wetting and allow high packing density hence the material is most appropriate for filament windings and pultrusion applications.
3. Used as a binder for manufacture of fiber glass reinforced laminate components by wet laying process.
4. Due to fast gelling behavior at higher temperature in combination with a suitable catalyst, the material can be most suitable for casting of large components by pressure gelation technique.

PACKING:

The material is packed in 200 Kg steel drums.

STORAGE :

The material has tendency to absorb moisture when left open to atmosphere. Necessary care should be taken to avoid moisture absorption , Once the originally sealed container is opened, lid of the container should be tightly fitted to avoid moisture ingress in container.

Although the viscosity of the material tends to increase at slow rate during storage. However, the material shall have a shelf life of 6 months (minimum) at 25°C in respect of its usability from the date of supply when stored in sealed original container and protected from sun light and rain.

¹ The information contained in this data sheet is based on the current state of our knowledge and is accurate to the best of our knowledge and is given for supporting the user to establish an appropriate application at his end. BHEL bears no liability relative to the use of this material. The buyer is expected to satisfy himself about suitability of the material for his intended process or purpose.