

# **COLTECH R 350**

**TECHNICAL DATA SHEET** 

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## **Rigid Epoxy Insulating Resin**

## **Product description**

COLTECH R 350 is a two component, solvent free, rigid, epoxy electro-insulating resin. It provides excellent durability, chemical resistance properties with minimum shrinkage.

Cures by reaction (cross linking) of the two components at room temperature.

#### Uses

The COLTECH R 350 is a specialized rigid epoxy electro-insulating resin for:

- production of low and medium voltage transformers
- production of low and medium voltage capacitors
- Covering / Copyright protection of electronic circuits

Also used for filling and casting applications.

## **Advantages**

- Shore D 50-60
- Cold curing
- Good adhesion to metal and different plastics
- · Excellent hydrolytic stability
- Low exothermic reaction temperature
- Minimum shrinkage
- · High impact strength
- · Chemical and hydrocarbon resistant
- Over 10 years of positive feedback worldwide.

## Consumption

1,4 kg / liter

## Colors

The COLTECH R 350 is supplied in black. Other colors may be supplied on demand.

### Technical Data \*

PROPERTY	RESULTS	TEST METHOD	
Composition	Epoxy Resin + Hardener. Solvent free.		
Mixing Ratio	A : B = 100 : 30 by weight		
Hardness (Shore D Scale)	60 + 5	ASTM D 2240	
Solids Content	100 %	CALCULATED	
Temperature strength	80°C (Fully cured)	IN HOUSE LAB	
Low Temperature Brittleness	-40° C (Fully cured)	IN HOUSE LAB	
Pot Life	45 minutes		
Tack Free Time	3 hours		
Initial Curing Time	24 hours	Conditions:20°C,50%RH	
Final Curing time	7 days		

## **Chemical Properties**

Water	+	Hydrochloric acid 5%	+
Potassium hydroxide 5%	+	Unleaded fuel	+
Sodium hydroxide 5%	+	Diesel fuel	+
Salt water 20%	+	Xylene	+
Domestic Detergents	+	DMSO	-
Sulfuric acid 5%	+	N-Methyl pyrrolidone	-
{+ stable, - unstable, ± stable for a	short period.}		

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## **Application**

### **Cast Housing Preparation**

Before casting / filling check that housings or moulds are free of moisture (Maximum surface moisture content should not exceed 4%).

#### Mixing

Stir COLTECH R 350 Component A well before using. Stir COLTECH R 350 Component B well before using.

COLTECH R 350 Component A and Component B should be mixed by low speed mechanical stirrer, according to the indicated mixing ratio in this technical data sheet, for about 3 min if applied manually. Both parts (Component A and Component B) have to be mixed at a temperature higher than 18°C.

**ATTENTION:** The mixing of the components has to be effected very thoroughly, especially on the walls and bottom of the pail until the mixture becomes fully homogeneous.

#### Casting / Filling

Pour COLTECH R 350 resin into the mould.

**RECOMMENDATION:** Use suitable vacuum apparatus to remove entrapped air bubbles.

ATTENTION: Please ensure consumption within the Pot Life.

## **Packaging**

Pails should be stored in dry and cool rooms for up to 9 months. Protect the material against moisture and direct sunlight. Storage temperature: 5°-30°C. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number and application precaution labels.

#### Safety measures

Please study the Material Safety Data Sheet. PROFESSIONAL USE ONLY

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