

# COLTECH R 390

TECHNICAL DATA SHEET  
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## Insulating Resin / Varnish

### Product description

COLTECH R 390 is a single component, solvent based, semi rigid, electro-insulating sealer resin. It provides excellent durability, chemical resistance properties with minimum shrinkage.

Cures at room temperature.

### Uses

The COLTECH R 390 is a specialized impregnating electro-insulating resin / varnish for secondary insulation of:

Low and medium voltage transformers, stators and coils

### Advantages

- Cold curing
- Good adhesion to metal and different plastics
- Excellent hydrolytic stability
- Minimum shrinkage
- High impact strength
- Chemical and hydrocarbon resistant
- Over 10 years of positive feedback worldwide.

### Consumption

0,3 -0,4 kg / m2 in double dip procedure

### Colors

The COLTECH R 390 is supplied in black.  
Other colors may be supplied on demand.

### Technical Data \*

PROPERTY	RESULTS	TEST METHOD
Hardness (Shore A Scale)	>80	ASTM D 2240
Solids Content	35 %	CALCULATED
Temperature strength	80°C (Fully cured)	IN HOUSE LAB
Low Temperature Brittleness	-40° C (Fully cured)	IN HOUSE LAB
Pot Life	No limitation as single component. Dip procedure possible	
Tack Free Time *	1-3 hours	Conditions:20°C,50%RH
Initial Curing Time	24 hours	
Final Curing time	7 days	

\* Tack free times can be adjusted according production requirements with the addition of Catalyst (accelerator).

### 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.}			

### Application

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#### Surface Preparation

Before impregnation, check that coils are free of moisture (Maximum surface moisture content should not exceed 4%).

#### Dip procedure

Double dip the coil into the varnish.

Allow 1-2 hours to cure and repeat double dip procedure.

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

### Packaging

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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<sup>o</sup>-30<sup>o</sup>C. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number and application precaution labels.

### Safety measures

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Please study the Material Safety Data Sheet. **PROFESSIONAL USE ONLY**

COLTECH

Our technical advice for use, whether verbal, written or in tests, is given in good faith and reflect the current level of knowledge and experience with our products. When using our products, a detailed object-related and qualified inspection is required in each individual case in order to determine whether the product and /or application technology in question meets the specific requirements and purposes. We are liable only for our products being free from faults; correct application of our products therefore falls entirely within your scope of liability and responsibility. We will, of course, provide products of consistent quality within the scope of our General Conditions of Sale and Delivery. Users are responsible for complying with local legislation and for obtaining any required approvals or authorizations. Values in this technical data sheet are given as examples and may not be regarded as specifications. For product specifications contact our R+D department. The new edition of the technical data sheet supersedes the previous technical information and renders it invalid. It is therefore necessary that you always have to hand the current code of practice.