



TECHNICAL BULLETIN
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PRODUCT INFORMATION

ULTIFIL 2001/820

2 PART EPOXIDE

RED

THERMALY CONDUCTIVE

DURABLE SHOCK RESISTANT

PROTECTIVE COATING

CLASS B

ULTIFIL 2001/820

GENERAL

Ultifil 2001/820 is a filled, thixotropic, 2 part, epoxy compound which provides a high build, resilient protective coating for windings and other components. The material is applied by brush or pallet knife, and when cured gives a high degree of bond to most surfaces as well as excellent resistance to alkalis, acids, oils and moisture.

APPLICATION

Ultifil 2001/820 gives a high build coating for mechanical, moisture and chemical protection of exposed windings and component parts.

ULTIFIL 2001/820

HARDENER

BASE

Appearance

Beige, thixotropic liquid

Red, thixotropic liquid

Viscosity

Thixotropic

Thixotropic

Specific Gravity

1.92 - 2.02

1.40 - 1.50

Shelf Life

Over 12 months

Over 12 months

ULTIFIL 2001/820A/B MIXTURE

Mixing ratio A:B

1:1 Weight:Weight

3:4 Volume:Volume

Useable life

1-2 hours at ambient temperature

CURE SCHEDULE

Cure. Temperature
Time

20°C

60°C*

24 hours

4 hours

*When curing at elevated temperature, it is best to allow a 2-4 hour gelation period to prevent a possible adverse reaction on film structure.



ULTIFIL 2001/820

WORKSHOP PRACTICE

Most problems occur with 2 part systems due to the failure to mix correctly. The following procedure is recommended:

Stir the base component prior to mixing to ensure any settled filler is included. The stirring process should scrape the bottom and the sides of the container and be sufficient to ensure there are no dead areas of unmixed material but should also be a relatively slow process stirring in a horizontal circular motion so that minimal air is included into the mix. If time permits this initial stir is made easier if the base component only is heated to 30-40°C and stirred some hour before the 2 components are mixed. Use of still warm base component will reduce the usable life of the mixture. The base and hardener can be measured out by weight, volume, but it should be noted the usable life of the mixture decreases as the weight of the mixture increases. Ensure the base and hardener are mixed thoroughly using the scraping minimal air inclusion method described previously. This mixing process can take up to 4-5 minutes, and it is recommended that, if the usable life allows, extra time is spent mixing at this stage where failure to mix is most frequent.

CURED PROPERTIES

Shore D hardness		DIN 53505	87
Thermal class		IEC216	130°C
Temperature range		Olyphant Test	-40 to +130°C
Dielectric strength	ambient	IEC 243-1	157 kV/cm.
	130°C	IEC 243-1	40kV/cm
Dielectric constant		IEC 250	5.6 50Hz
Volume resistivity		IEC 93	>10 ¹³ ohm/cm
Thermal Conductivity		ISO 8894-1	0.55 W/M/K
Adhesion		kgms/cmP	7.7

PACKAGING

12 kg, kits (6kg of each)

STORAGE

24 months shelf life, stored between 10°C and 30°C.
 Filled epoxide systems can have a tendency to settle.
 Ensure the base is stirred before mixing.

HEALTH & SAFETY

See relevant Material Safety Data Sheet.

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NOTE: Due to the introduction of improvements from time to time the right is reserved to supply products that may differ slightly from those illustrated or described in this publication.

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