

TECHNICAL DATA FACT SHEET

FIBERGLASS RESIN

DESCRIPTION:

Fiberglass Resin is a high performance product featuring unsaturated polyester resin and styrene monomer for use in car repairs and similar applications. Fiberglass resin is catalyzed by carefully mixing in the specified amount of liquid hardener/catalyst*. Once incorporated uniformly throughout, the liquid hardener/catalyst initiates a rapid polymerization of the monomers and unsaturated resins, generating heat and resulting in a hardened product in about 15 to 30 minutes. The polymerization will continue to a diminishing degree and result in maximum hardness in less than 24 hours.

*See enclosed Technical Data on liquid hardener/catalyst

TYPICAL PHYSICAL PROPERTIES:

General Appearance: Greenish/amber/brown color

Smooth, viscous paste, approximately 20-

30 poises @ $72^{\circ}F/22^{\circ}C$ with a

characteristic odor

Density: About 9.3 lbs/gallon (1.1 kg/liter) Shelf Life: 12 months when stored at normal

temperatures of $40-90^{\circ}F$ ($4-32^{\circ}C$)

When Catalyzed & Cured:

Gel Time: 9-15 minutes
Pot Life: Dependent on mass

Peak Exotherm: Based on 4oz (113 grams) mass about 200°F

(93°C)

Barcol Hardness: 40-44

Heat Distortion Point: 264 psi, 180°F (83°C)

Tensile Strength: psi, 10,000 Flexural Strength: psi, 17,500 Flexural Modulus: 5.5×10^5

ATTRIBUTES:

Extensively tested and preferred by professional trade, Fiberglass Resin is quick and easy to use. It is used for various shop jobs, as well as, home purposes: repairing automobiles, fiberglass boats, re-coating wood or canvas boats, small parts production, etc. It's long gel time, fast cure, tack- free surface, good shelf stability, and medium viscosity are but some examples of its' many attributes.



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LIQUID HARDENER/CATALYST

DESCRIPTION:

Liquid hardener/catalyst is Ketone Peroxide solution. This product offers excellent curing characteristics with especially promoted unsaturated polyester resins, and safety over the usual grades of MEKP systems.

SPECIFICATIONS:

Active Oxygen: 8.4% minimum

TYPICAL PROPERTIES:

Active Oxygen: 8.5%

Appearance: Clear liquid

Specific Gravity: 12 centipoises ± 2 @ 77°F (25°C)

Flashpoint: Seta flash Closed Cup 110°F

Solubility: Soluble to some extent in most organic solvents, such as glycols,

etc.

APPLICATIONS:

Liquid hardener/catalyst offers excellent curing characteristics with unsaturated polyester resins promoted with accelerators or promoters, such as dimethylanaline, diethylanaline, and salts of cobalt or zirconium.

CAUTION! NEVER MIX ACCELERATORS OR PROMOTERS, SUCH AS COBALT NAPTHANATE DIRECTLY WITH LIQUID HARDENER/CATALYST. MIXTURE OF THESE CAN DECOMPOSE VIOLENTLY! First, disperse thoroughly the required amount of the accelerator(s) into the resin; then add and disperse the liquid hardener/catalyst.

HANDLING AND STORAGE:

Liquid hardener/catalyst is a fire resistant organic perioxide, but it must be handled with care.

FLAMMABILITY:

Liquid Hardener/Catalyst will burn slowly when in contact with an open flame. Keep liquid hardener/catalyst in isolated areas at temperatures below $100^{\circ}F$ ($38^{\circ}C$) away from all sources of heat and ignition, such as radiators, steam pipes, direct rays of the sun, open flames and sparks.

CONTAMINATION:

Exercise care to avoid contamination of liquid hardener/catalyst with combustible materials, strong oxidizing or reducing agents and accelerators for polymerization actions, etc. Do not add accelerators, such as dimethylanaline, diethylanaline, or salts of

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cobalt directly to this material as vigorous decomposition may result.