Technical Data Sheet

Impregnation resin ImpResin90

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Product description

ImpResin90 is characterized by the following features:

Technology	Acrylic
Chemical Type	Methacrylate monomers
Appearance (uncured)	Clear liquid
Emulsification	Homogeneous milky white dispersion
Fluorescence	Positive under UV light
Components	One component – no mixing required
Viscosity	Low
Cure	Heat cure
Application	Sealing

ImpResin90 is a water washable, heat cure sealant for impregnating of porous materials. It cures to form a durable plastic as a result of a free radical polymerization reaction, by exposure to elevated temperatures above 80°C. ImpResin90 is recommended for the impregnation of low to medium volume products and for all impregnation services, where simplicity and ease of maintenance are priorities. This product is used in the automotive, OEM supplier, defense, aerospace and other industries to seal microporosity in metal castings, parts from metal powders, welds and other porous products.

Properties of uncured material

Specific gravity, 25°C	1.0
Surface tension, Astm D 1590, dyn / cm	32.6
Flash point	see Material Safety Data Sheet
Viscosity, mPa-s (cP)	5 … 20

Properties of cured material

Physical properties:	
Hardness Shore D	76
Properties of degassing:	
Flying liquefied material, (VCM), %	0,07
Temperature range °C	-50 … +200

Environmental resistance

Solvent resistance:

ImpResin90 has passed all resistance requirements for the following solvents.

Factor	**Result**
Water	no leakage
Oil	no leakage
Hydraulic fluid	no leakage
Hydrocarbon solvent	no leakage
Turbine fuel	no leakage
Lubricating oil	no leakage
Ethylene glycol	no leakage

General information

This product is not recommended for use in pure oxygen systems and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

More information about safe handling with this product you will find in Material Safety Data Sheet (MSDS).

Instructions for use with curing in a water bath

NOTE: When determining adequate heat cure processing times, the heat transfer characteristics of the processed parts must be carefully considered. Effective cure time should be measured from the time the entire part reaches the desired curing temperature.

1. Use one of the following impregnation methods with ImpResin90: dry vacuum / pressure, wet vacuum / pressure.
2. After impregnation procedure, put parts in drip station or centrifuge to remove excess surface resin.
3. Wash the parts in clean water.
4. Soak the parts in hot water tank. Allow sufficient time for sealant to cure within the parts. A corrosion inhibitor can be added to the hot water tank to provide part protection from rus tor corrosion.
   NOTE: At 90°C sealant will cure in 4 to 10 minutes, but allow sufficient time for interior sections of parts to reach that temperature.
5. Remove parts from the hot water tank, and allow sufficient time to thoroughly cool.

Storage

Store in the unopened container in a dry location, away from direct sunlight or other UV light sources.

Optimum storage at 2°C to 10°C.

Storage below 2°C or above than 10°C can adversly affect the product's properties. The producer is not responisble for a product that has been stored in non-recommended conditions.

Waste dispodal

Wastes generated during the impregnation proces can be treated as conventional waste.

It is necessary to follow all local, state or international regulations for disposal.