



MP361W (Winter version)

Is a low viscosity, impregnating resin based on a two-part silicate/isocyanate composition

Application	Key Properties
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Pipe Repair	High rigidity Non-toxic Low viscosity High adhesion and toughness High chemical resistance
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Description	
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Basic	Two-component epoxy system
Resin	HP361W
Hardener	RP361W

Processing	
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Mix Ratio by Weight	0.63: 1
Mix Ratio by Volume	0.48: 1

Physical Data (approx.-values)			
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	Resin	Hardener	Mixed
Colour	Brown	Translucent	Brown
Specific Gravity	1.24	1.6	1.4
Viscosity m.Pa.s@25°C	200	1000	500

Cure Schedule (150ml sample)				
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Temperature	Working Life (Minutes)	Gel time (Minutes)	Light Handling (Minutes)	Full Cure (Hours)
10°C	18-22	50	100-120	72
20°C	13-15	16-20	75-100	48
30°C	8-12	-	45-55	24

*RT is defined as 20-25°C

The above are typical values and will vary depending on the cured mass and application. Hotter temperatures may be used for faster cure but will result in higher post cure shrinkage and higher cure exotherm. Experimentation and testing is suggested to avoid side effects. For maximum properties a post cure may be required – Contact our technical service department for advice.

Typical Properties		
Hardness	85	Shore D
Tensile Strength	35	MPa
Elongation at break	5	%
Compressive Strength	50-70	MPa
Thermal Conductivity	0.45	W/mK
Operating temperature range	-50 to +120	°C (application & geometry dependent)

Combustion

MP361W will ignite at temperatures >400°C. Decomposition is by depolymerisation, liberating the silicate and isocyanate. Pyrolysis decomposition products will consist of carbon, carbon dioxide, carbon monoxide, hydrogen cyanide, nitriles and water.

Contact: **Technical Support on +44 (0) 1709 864271 or contact@rsm-web.com** for details.

Disposal

Provided the resin and hardener have been properly mixed, as per instructions, the resultant material will be chemically inert and therefore able to be land filled subject to local government regulations.

Approvals

RoHS compliant	Yes
UL94-V0	No
REACH (SVHC concentration)	%

Packaging

MP361W is available in Bulk, Twinpacks, kits and sets

Availability

Available through RSM Lining Supplies Global Limited

Cartridge Mixing

Available on request

It is essential for best results that the cartridge is 'balanced' before use to ensure correct mixing. Loading the cartridge into the gun before attaching the mixer element and pumping the gun to push a small amount of the contents forward will achieve this. Wipe the excess from the cartridge tip and add the static mixer. The cartridge is now ready for use.

Twinpacks	
MP361W/NC/1010	
MP361W/NC/1430	
MP361W/NC/2030	

Twinpacks are pre-weighed resin and hardener components contained in a tough flexible film, separated by a removable clip and rail. Once the clip and rail is removed the resin and hardener is thoroughly mixed within the bag and is immediately ready for use.

Mixing will normally take ~ 2 minutes due to the viscosity; but pay special attention to the corners. Twinpacks are ideal for small to medium production runs, prototyping and on-site or field use.

The twinpack weight/volume may also be tailored to a specific size on request.

For further details please visit www.rsm-web.com

Bulk Material	
HP361W/NC/16KG	RP361W/NC/26KG

Both resin and hardener are supplied drums and fully evacuated and ready for use.

Care should be taken to ensure when mixing the resins air is not entrained in the mixture.

If this is unavoidable the mixed resin and hardener should be re-evacuated before dispensing.

The bulk resin and hardener materials can be dispensed from suitable dispensing machinery and RSM produce a range of these machines, details that can be provided on request.

Kits and Sets	
MP361W/NC/42KG KIT	Sets available on request

Kits and Sets are provided in separate containers to the correct ratio.

In Kit form, pour the hardener into the larger resin container and use it as a mixing vessel.

Stir well using an appropriate mixer until homogeneous.

Note: Incomplete mixing will be characterised by erratic or partially incomplete cure even after extended time periods.

Cleaning

All equipment contaminated with mixed material should be cleaned before the material has hardened.

TS130 is a suitable non-flammable cleaning agent, although other solvents may be found suitable.

TS130 will also remove cured material provided it is allowed to soak for a number of hours.

Storage and Shelf Life

Material stored in the original unopened containers under cool dry condition between 15° and 25°C will have a shelf life of at least two years.

Once used the containers must be kept sealed to prevent effects from water, air or contaminants.

Health and Safety

Epoxy resins, hardeners and solvents may cause sensitisation by skin contact or inhalation may be corrosive, harmful or toxic. It is therefore strongly recommended that skin and eye contact is avoided by the using of appropriate personal protective equipment; such as gloves, safety glasses or goggles and overalls. Wash any contamination from the skin immediately and thoroughly and do not eat, smoke or drink in the working vicinity.

Under spraying conditions where vapour levels are likely to exceed the occupational exposure limits appropriate respiratory protection must be worn.

A suitable spray booth should be used with appropriate solvent scrubbing, cleaning and collection facilities. Local exhaust ventilation (LEV) will be required especially for curing ovens or where large volumes of material are curing. The above is given as a guide only; please refer to RP/HP361W Health and Safety data or our Technical Service Department for individual/specific advice.

The results and information above does not constitute a specification and is given in good faith and without warranty. The information is derived from test/or extrapolations believed to be reliable and is quoted for guidance only. The product is offered for evaluation on the understanding the customer satisfies himself that the product is suitable for his intended by proper evaluation and testing.

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