

Features & Benefits

- 💧 Free from solvents, isocyanates, silicones and PVC compounds
- 💧 Cures at room temperature
- 💧 No mixing required

Description

PERMABOND® MS359 is a single-part, room temperature curing MS polymer adhesive. It is ideal for use on a wide variety of substrate materials including metals, plastics and composites. It is ideal for exterior construction applications (e.g. frames and fascias) as it has excellent resistance to weathering.

Physical Properties of Uncured Adhesive

	MS359
Chemical composition	MS-Polymer
Appearance	Grey
Viscosity @ 25°C	5rpm: 1,500,000-2,500,000mPa.s (cP) 1rpm: 4,500,000-9,000,000mPa.s (cP)
Density	1.50

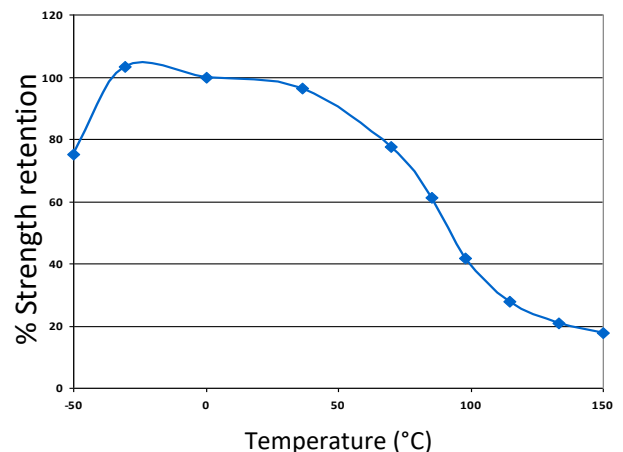
Typical Curing Properties

Curing mechanism	Humidity
Skin over time	10-20 minutes
Cure rate	Approx. 5mm / 24 hours

Typical Performance of Cured Adhesive

Shear strength (ISO4587)	Steel: 2-3 MPa (290-440psi) Aluminium: 2-3 MPa (290-440psi) Zinc: 2-3 MPa (290-440psi) PVC: 2-3 MPa (290-440psi) Polycarbonate: 1-1.5 MPa (150-220psi) Polystyrene: 1-1.5 MPa (150-220psi) Wood: 2-3 MPa (290-430psi)
Tensile strength DIN53504	2-3 MPa (290-440psi)
Elongation at break DIN53504	150-350%
Hardness ISO868	45-60 Shore A

Temperature Resistance



"Hot strength" shear strength tests performed on mild steel. 24hr cure at room temperature and conditioned to pull temperature for 30 minutes before testing.

MS359 can withstand higher temperatures for brief providing the joint is not unduly stressed. The minimum temperature the cured adhesive can be exposed to is -40°C (-40°F) depending on the materials being bonded.

Additional Information

This product is not recommended for use in contact with strong oxidizing materials. This product may affect some thermoplastics and users must check compatibility of the product with such substrates.

Information regarding the safe handling of this material may be obtained from the material safety data sheet (MSDS).

The information given and the recommendations made herein are based on our research and are believed to be accurate but no guarantee of their accuracy is made. In every case we urge and recommend that purchasers before using any product in full-scale production make their own tests to determine to their own satisfaction whether the product is of acceptable quality and is suitable for their particular purpose under their own operating conditions. THE PRODUCTS DISCLOSED HEREIN ARE SOLD WITHOUT ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.

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Users are reminded that all materials, whether innocuous or not, should be handled in accordance with the principles of good industrial hygiene.

Surface Preparation

Surfaces should be clean, dry and grease-free before applying the adhesive. Permabond Cleaner A is recommended for the degreasing of most surfaces. Some metals such as aluminium, copper and its alloys will benefit from light abrasion with emery cloth (or similar), to remove the oxide layer.

Directions for Use

- 1) Surfaces must be clean, dry and grease-free prior to bonding.
- 2) Use a caulking gun to dispense adhesive directly from cartridge.
- 3) If it is hard to extrude, warming the cartridge will reduce the viscosity and allow easier dispensing.
- 4) The adhesive can be spread with a spatula if required.

Storage & Handling

Storage Temperature	10 to 25°C
Shelf Life Stored in original unopened containers	12 months

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