WC270 – Technical Data Sheet



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Description

WC270 is a two-part acrylic adhesive (cement) that hardens at room temperature by polymerisation. Part A is a mobile monomer / polymer syrup and Part B is a liquid catalyst solution.

WC270 has been developed especially for bonding / fabricating / cementing cast acrylic sheet (Perspex). It will bond cast acrylic (Perspex) materials to other material, such as wood. The product is specifically used for outdoor / external applications e.g. sign making etc.

Physical Properties

	Part A	Part B
Polvmer Base	Methvl Methacrvlate	Peroxide
Solids	100%	5%
Viscositv	1500 mPas	Liauid
Specific Gravity	1.0 approx	1.0 approx
Storage	5-25°C	5-25°C

Directions for Use

Part A of **WC270** is flammable. So there must be no smoking or naked flames in the area where WC270 is being used.

1. Surfaces to be coated should be clean, dry and free from dust and grease.

2. WC270 Part A must be at room temperature i.e. $16 - 20^{\circ}$ C. If it has been stored below 15° C it must be allowed to come to room temperature naturally. This can take several hours.

3. Add 1 part of Part B to 20 parts of Part A and stir thoroughly but slowly to avoid air bubbles occurring (parts by weight or volume can be used). The cement will not polymerise (harden) properly if different portions of the catalyst (Part B) are used. If only small volumes of the cement are needed, dispense one drop of Part B directly from its container for every one gram (1 ml) of Part A.

4. Hardening begins as soon as the catalyst (Part B) is added. Use the mixed cement within 20 minutes, otherwise the bond will be weakened. After mixing, cover the vessel and leave it until the larger air bubbles have risen to the surface. Remember that the bubbles should be allowed to rise and the job completed in 20 minutes of adding the catalyst.

5. Cementing operations should not be undertaken at temperatures below 15° C as the setting time can be affected. Ideally, the temperature should be $20 + 5^{\circ}$ C.

6. Setting begins as soon as the catalyst is added and the cement should be hard within 1½ - 2 hours. After this time, the joint may be handled carefully. Light machining is possible after 4 hours but a better finish and stronger joint will be obtained if left for 24 hours.

Precaution

1. Because of its low viscosity, the gap-filling properties of the cement are limited. Special masking techniques will be needed to keep the cement in place if large gaps are to be filled. In addition, the cement shrinks in volume by 20% as it hardens, so cavities need to be over-filled to allow for this.

2. Part A has a slight purple tinge and Part B is a light straw colour. After prolonged outdoor exposure (years) in warm climates, a slight yellowing of the hardened cement may occur. This will not affect the mechanical properties of the cement.

3. Part A is suitable for at least 12 months when stored in its original container, in a metal cabinet or other suitable store at a temperature below 20°C. Part B should be stored as above at a temperature between $0 - 5^{\circ}$ C. At lower temperatures (- 10°C) the catalyst may crystallise out of solution. It is important that all solid deposits should be re-dissolved before the solution is used. This should be done by carefully warming to about 20°C and shaking.

4. If Part B becomes deeply coloured (yellow/orange), the hardening time should be tested by mixing a small amount of both components. Obtain a new bottle of Part B if the cement sets slowly.

5. This adhesive is not recommended for structural applications on aircraft.

Please consult the WC270 Health & Safety Data Sheet for statutory regulation information.

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