

Wessex 4401

(UW 44 (P2))

MOISTURE TOLERANT EPOXY

Technical Data Sheet

DESCRIPTION

Used with a suitable hardener, an epoxide resin will produce high specific adhesion to many materials including wood, metals, concrete and ceramics. Compounded with selected filler in large quantities, both resin and hardener become putty-like which, when mixed together, can be used on most surfaces, can be moulded into shape while soft or shaped with hand tools when hard.

Wessex 4401 has been developed for fairing, filleting and gapfilling operations, but, in addition, this two-component epoxide based material has three further outstanding properties:

1. the mixed putty cures at temperatures as low as 5°C,
2. the system will cure in the presence of moisture and even underwater, and
3. it will tolerate some oil or grease contamination on the surface.

MIXING

Method	Resin : Hardener
	Part A : Part B
by Weight	1 : 1

The yellow filled epoxy resin component ("Part A") is mixed with the blue hardener component ("Part B") in the proportion of 1:1 by weight.

Equal weights of the resin and hardener are blended thoroughly together. The differently coloured components provide a visual aid to complete mixing which is indicated when the adhesive forms a uniform green colour.

Small quantities of up to 500g can be mixed by rolling and kneading in the hands until a homogeneous mix is obtained. For larger quantities a mechanical mixer is strongly recommended and those mixers employing a planetary action have been found to be most satisfactory.

STORAGE

Wessex 4401 Parts A and B should be stored in a warm dry environment where a temperature of between 10°C and 30°C can be maintained. After use ensure that the lids and protective polythene sheet are replaced and are tightly secured. This should ensure that there is no contamination of the two components.

USABLE LIFE

When the two components are mixed together a uniform colour is obtained and the usable life of a 500g batch of Wessex 4401 epoxy putty is approximately

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45 minutes at 20°C and this will allow ample working time for most purposes. When mixing larger quantities of putty, the usable life becomes significantly shorter and it is advisable after mixing is complete to break down the mass of epoxy into small quantities.

SURFACE PREPARATION

Although the mixed putty is tolerant of some contamination, best results are obtained on well prepared surfaces. Ideally, surfaces should be mechanically abraded to provide the maximum mechanical key and be free from grease, moisture and dust particles and a solvent wipe will remove any contamination.

When the putty is used to make an emergency repair, it will not always be possible to make ideal surface preparations and, in some cases, the effectiveness and/or durability of the putty bond onto the substrate will be impaired. Decisions regarding surface preparation must be taken on site dependent upon the situation in hand, but advice can always be obtained from Wessex Resins & Adhesives Limited.

APPLICATION

This epoxy putty is formulated specifically for fairing, filleting and gapfilling work and the following procedures are recommended for such operations:

1. Apply freshly mixed putty and work thoroughly into surface to be built up.
2. Spread as required to the desired thickness and shape with the minimum entrapment of air.
3. Do not subject to heavy stress until the final cure time has elapsed.
4. With hand tools it is possible to cut back the putty to the required shape or form providing this is done immediately after the material has hardened. The putty will become extremely hard if a lengthy delay is allowed to elapse and the curing back operation will then prove very difficult.
5. Filleting is a versatile technique for joining components especially when the parts are near or at right angles to each other. The continuous bead of putty applied to the angle between the two parts to be joined increases the surface area of the bond and serves as a structural brace.