

epidermix 338

High-build thixotropic epoxy adhesive/
grout and patching compound

DESCRIPTION

Two-component, solvent-free, polyamide cured epoxy.

USES

As an adhesive / grout to join metal or cementitious water main pipe sections. Effect repairs to damaged cementitious lining of water main pipes.

BENEFITS

- Permanent, easy grouting and repairing

SURFACE PREPARATION

All surfaces with which **epidermix 338** will come into contact, must be clean, sound and dry.

Concrete must be free of laitance, dust, fractured aggregate, oil, grease and foreign matter. Abrasive blasting followed by dusting, will provide a sound surface.

Steel must be free of oil, grease, old paint, other foreign matter, millscale and rust. For maximum adhesion surface should be abrasive blast cleaned. Treat before steel starts to rust. Any lower standard of treatment will produce correspondingly lowered performance of the treatment.

MIXING

epidermix 338 components are heavy pastes and should be mixed in manageable amounts to ensure homogeneity once mixed. Uniformity in colour is an indication of homogeneity. Set up prescribed volumes of base and activator side by side on a clean board. Mix together by trowel or paint scraper until a streak-free, grey material results. Mixing should be continued for another 5 minutes.

PROPERTIES OF WET MATERIAL	
Mixing ratio	1:1 by volume
Density	1.884 g/cm ³
Colour :	
Base	Light grey
Activator	Black
Mixed	Grey
Flash point	+120° C
Dilution	Do not dilute
Consistency	Each component is a heavy paste
Toxicity	Uncured material is toxic
Fire resistance	Flammable

PROPERTIES DURING APPLICATION	
Application by	Trowel or putty knife
Pot life	90 – 130 min/500ml
Volume solids	100 %
Theoretical coverage	1 litre/m ² at 1mm film thickness
Maximum recommended thickness per layer	No slump on a drawdown 20mm thick by 50mm wide. Held vertically or suspended horizontally
Curing time @ 25° C	Touch dry- 6 hours Practical cure - 12 hours full cure - 7 days
Overcoating time @ 25° C	Min. 8 hrs Max. 24 hrs
Application temperature range	10° C – 40° C
Fire resistance	Flammable
Equipment clean-up	abe super brush cleaner

PROPERTIES OF CURED MATERIAL	
Maximum service temperature	Dry – 70° C Immersion – 70° C
Shrinkage during cure	Negligible
Fire resistance	Non flammable
Colour	Grey finish

CHEMICAL PROPERTIES OF CURED MATERIAL	
Toxicity	Non-toxic
Water resistance	Excellent
Tainting	Will not taint water
Chemical resistance: Initially	Not affected by the sterilization of the water main 4 hours after completion of the application
Chemical resistance Long term	Excellent resistance to water treatment chemicals at the concentration levels used for potable water
NOTE : Sterilization is achieved by filling the pipeline with clean water having a chlorine residual of 50mg/l and allowing it to stand for approximately 2 hours	

BONDING / PRIMING

Self priming.

COVERAGE

It is necessary to calculate specific demand from available dimensions.

APPLICATION

Joining of pipe segments

An epoxy filler is applied to the entire edge of concrete lining of the female

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section of the pipe, ensuring good contact by means of adequate tooling. Male and female connection is made. For steel pipes, it is recommended that tack welding of the pipe sections is carried out until the epoxy has partially set (4 – 6 hours).

Full seam welding, prior to initial setting of the epoxy, may result in sagging in overhead areas, because of heat transfer and consequent 'liquifying' of uncured epoxy at high temperatures.

Uncured excess **epidermix 338** is removed and tooled internally by means of a pig. **epidermix 338**, therefore, also provides continuity to the cementitious lining.

A squeegee type pig will produce a clean cut surface and effect less drag / disruption of uncured epoxy.

NOTE: All pipe joints that are not manually checked and manually tooled after pigging i.e. small bore (<450 cm id), must receive an application of epoxy to both male and female sections that are to be jointed. This will ensure more efficient wetting out of the joints and will result in a wet-on-wet contact which will result in more successful joints compared to a wet-on-dry contact. This will also aid in resisting slump, since the bead will be adhering to two faces rather than one.

Cementitious lining repair

Mixed **epidermix 338** should be pressed into place in the repair area, using a small amount first to wet out the surface and then building up the required thickness. The consistency of **epidermix 338** is sufficient to hold its place in soffit repairs and on vertical faces. If the volume is too big to repair in one placing, leave the contact surface rough to act as a key for a subsequent placing, once the first one has set.

A final smooth finish may be obtained by trowelling off the surface of the still uncured **epidermix 338** with a water dampened steel trowel.

CLEANING

abe super brush cleaner before dried/cured.

PROTECTION ON COMPLETION

Against traffic and spillage until cured.

TEMPERATURE AND RELATIVE HUMIDITY

See "Properties of wet material", "Properties of cured material" and "Properties during application.

MODEL SPECIFICATION

Two component, high build thixotropic epoxy adhesive, grout and patching compound for repairing and jointing cement lined steel water pipes and water mains.

The adhesive/grout/repair mortar shall be **epidermix 338**, a two component, high build thixotropic, polyamide cured, epoxy compound applied in accordance with the manufacturers recommendations, **abe Construction Chemicals (Pty) Ltd.** The mortar shall be suitable for use in potable water applications and be resistant to water treatment chemicals.

PACKAGING

epidermix 338 is supplied in 20l kits.

HANDLING & STORAGE

This product has a shelf life of 24 months if kept in a dry cool place in the original packaging. In more extreme conditions this period might be shortened.

HEALTH & SAFETY

Wet **epidermix 338** is toxic and flammable. Always ventilate the working area well during application and drying. Avoid flames in vicinity. Always wear gloves and eye protection when working with the material and avoid excessive inhalation and skin contact as well as smoking or eating while working with the compound.

If material is splashed in the eye, wash with copious quantities of clean water and seek medical attention.

Cured **epidermix 338** is inert and harmless, being non-toxic. When transporting liquids and semi liquids by aircraft, ask for material safety data sheet.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **abe Construction Chemicals** endeavours to ensure that any advice, recommendation, specification or

information is accurate and correct, the company cannot - because **abe** has no direct or continuous control over where and how **abe** products are applied - accept any liability either directly or indirectly arising from the use of **abe** products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements. **abe Construction Chemicals** has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in building and construction technology.



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