

# CONCREX® ACID STRENGTH

Permanent repairs for acid  
damaged concrete



**AREAS OF USE**

- Where strong chemicals are used or stored

**FEATURES**

- Resists 95% sulphuric acid
- Virtually indestructible and non-dusting
- Repairs can be feather edged
- Ready for traffic in six hours
- Easy to apply

**DESCRIPTION**

Watco Concrex Acid Strength is a high strength epoxy resin mortar with outstanding chemical resistance for heavy duty repairs to masonry and concrete floors. It has been developed to give outstanding chemical resistance, against even 95% sulphuric acid. It offers all the strength, ease of use and durability of Concrex®, but is ideal for areas where strong chemicals are used or stored.

**SPECIFICATION**

Composition	A resin rich blend of specially selected finely graded aggregate and epoxy resin. A curing agent is added at point of use.	Pot Life	30-60 minutes depending on temperature. If Concrex Acid Strength is used past its working life, trowelling will become difficult and adhesion will be reduced.																																																																		
Number of Components	2	Cleaning Tools	Equipment used for mixing and applying should be wiped clean with white spirit or a similar solvent before the Concrex® Acid Strength cures.																																																																		
Primer Required	A primer is not usually required if patch or crack repairing. Watco Tack Coat adhesive primer is recommended when applying Concrex® Acid Strength as a thin section screed or when applying to smooth, non-porous or metal surfaces.	Shelf Life	12 months in unopened containers.																																																																		
Usage Interior/ Exterior	Interior & exterior.	Storage	Store at an ambient temperature above 10°C for approximately 8 hours prior to use. Do not allow to freeze.																																																																		
Application Tools	Steel float or trowel.	Safety	All product labels provide general safety information. Material Safety Data Sheets are available. Food products must be removed from the area during application and cure.																																																																		
Suitable For	Concrete, sand & cement and metal.	Principle Limitations	Please contact us regarding applications not described here. Do not steam clean or subject the finished Concrex Acid Strength repair to temperatures above 60°C (140°F).																																																																		
Pack Size	10kg	<b>CHEMICAL RESISTANCE</b>																																																																			
Coverage	Approximately 1.2m <sup>2</sup> per 10kg and 3m <sup>2</sup> per 25kg at 5mm thick.	<table border="1"> <thead> <tr> <th rowspan="2">Name</th> <th rowspan="2">Concentration</th> <th colspan="4">Exposure to acid</th> </tr> <tr> <th>24 hours</th> <th>7 days</th> <th>14 days</th> <th>28 days</th> </tr> </thead> <tbody> <tr> <td>Hydrochloric Acid</td> <td>35%</td> <td>**</td> <td>**</td> <td>**</td> <td>**</td> </tr> <tr> <td>Sulphuric Acid</td> <td>95%</td> <td>**</td> <td>**</td> <td>**</td> <td>**</td> </tr> <tr> <td>Nitric Acid</td> <td>20% max</td> <td>**</td> <td>**</td> <td>**</td> <td>*</td> </tr> <tr> <td>Phosphoric Acid</td> <td>85%</td> <td>**</td> <td>**</td> <td>**</td> <td>**</td> </tr> <tr> <td>Acetic Acid</td> <td>5%</td> <td>**</td> <td>**</td> <td>**</td> <td>**</td> </tr> <tr> <td>Tartaric Acid</td> <td>10%</td> <td>**</td> <td>**</td> <td>**</td> <td>**</td> </tr> <tr> <td>Oxalic Acid</td> <td>10%</td> <td>**</td> <td>**</td> <td>**</td> <td>**</td> </tr> <tr> <td>Citric Acid</td> <td>10%</td> <td>**</td> <td>**</td> <td>**</td> <td>**</td> </tr> <tr> <td>Lactic Acid</td> <td>10%</td> <td>**</td> <td>**</td> <td>**</td> <td>**</td> </tr> </tbody> </table>				Name	Concentration	Exposure to acid				24 hours	7 days	14 days	28 days	Hydrochloric Acid	35%	**	**	**	**	Sulphuric Acid	95%	**	**	**	**	Nitric Acid	20% max	**	**	**	*	Phosphoric Acid	85%	**	**	**	**	Acetic Acid	5%	**	**	**	**	Tartaric Acid	10%	**	**	**	**	Oxalic Acid	10%	**	**	**	**	Citric Acid	10%	**	**	**	**	Lactic Acid	10%	**	**	**	**
Name	Concentration	Exposure to acid																																																																			
		24 hours	7 days	14 days	28 days																																																																
Hydrochloric Acid	35%	**	**	**	**																																																																
Sulphuric Acid	95%	**	**	**	**																																																																
Nitric Acid	20% max	**	**	**	*																																																																
Phosphoric Acid	85%	**	**	**	**																																																																
Acetic Acid	5%	**	**	**	**																																																																
Tartaric Acid	10%	**	**	**	**																																																																
Oxalic Acid	10%	**	**	**	**																																																																
Citric Acid	10%	**	**	**	**																																																																
Lactic Acid	10%	**	**	**	**																																																																
Curing Time	Light traffic in 8 hours at 15°C, 6 hours at 20°C and heavy traffic in at least 16 hours at 15°C - 20°C. Full chemical resistance reached in 7 days.																																																																				
Cleaning	When fully cured, proprietary detergents or degreasants may be used to clean the surface.																																																																				

\*\*Excellent  
\*Good

**PREPARATION & APPLICATION****SURFACE PREPARATION**

Surfaces should be clean, dry and free of all loose material. Wire brushing or sweeping is generally sufficient. Watco Bio-D degreaser can be used to remove grease and oil. If the surface is damp, it can be primed with Watco Tack Coat.

**MIXING**

Each pack of Concrex® Acid Strength contains aggregate pre-blended with resin and the curing agent. If the entire pack of Concrex® Acid Strength cannot be used within 30-60 minutes the products can be part mixed.

To split a pack, carefully halve the aggregate/resin mix (ideally divide it by weight) and use half the number of curing agent bottles or tins. Do not split the contents of a curing agent bottle or tin. Do not mix inside the plastic bucket. Wear protective gloves.

Tip the aggregate on to a mixing tray or board. Shake the bottles or tins of curing agent thoroughly until the liquid is a uniform colour. Form the aggregate into a mound and leave a small hole in the middle. Empty the curing agent into the hole, ensuring the bottles or tins are completely drained.

Carefully mix the aggregate with the curing agent using a trowel until a smooth mortar is obtained, this will take several minutes. The more thorough the mixing, the 'wetter', smoother and more manageable the mix becomes. Alternatively, you can knead the mixture by hand, but you must wear suitable gloves. It is important to mix thoroughly until you achieve a consistent colour. Machinery such as a 'Cretangle' mixer or suitable open pan mixer can be used to ensure thorough mixing of large quantities. Once mixed, the product is trowelled firmly against the surface to be repaired and finished with a steel trowel or float.

**APPLICATION**

Trowel firmly against the surface to be repaired, and finish with a trowel or float. To prevent 'drag' on the trowel, moisten a rag with white spirit and wipe it across the blade which will allow you to create a smooth finish. Concrex® Acid Strength is normally applied in thicknesses of 5mm - 50mm, but repairs can be feather-edged for a neat finish, as long as the majority of the repair is at least 5mm thick. For repairs deeper than 50mm, apply in separate layers (allow 6 - 8 hours between layers for curing) or use Watco Concrex® Deep Fill (which can be applied 15mm - 100mm thick in one layer). There is no need to reapply Watco Tack Coat if building up in layers.

**SAFETY**

Avoid contact with the skin. Barrier creams or gloves are recommended. Cleansing creams should be used after accidental contact with the skin and/or washing with plenty of soap and hot water. Accidental contact with the eyes should be treated by flushing with water for 15 minutes and medical advice sought. A detailed Material Safety Data Sheet is available.



**WATCO.CO.UK**

Watco UK Limited, Eastgate Court, 195-205 High Street, Guildford, Surrey, GU1 3AW, UK Tel: 01483 418 418 Fax: 01483 428 888 [www.watco.co.uk](http://www.watco.co.uk) E-mail: [sales@watco.co.uk](mailto:sales@watco.co.uk)