

PRODUCT NAME

AQUACHEM®

Aquachem® Primer (clear) 3040
Aquachem® Top Coat (Grey) 3008
Aquachem® (10sq/m Kit) 3044

Product Description

Aquachem® is a 2-component water based epoxy coating system suitable for a variety of applications and substrates. **Aquachem®** is supplied in a 4.5ltr Primer Pack (clear) and a 5ltr Top Coat Pack (standard colour grey). **Aquachem®** is also supplied in a box set containing 1 x primer and 2 x grey top coats to cover an area of 10 sq/m.

Uses

Aquachem® is used to reinforce certain friable cement screeds

Aquachem® is used as a damp proof membrane (DPM) for concrete, wood or other types of moisture sensitive floor surfaces including bitumen

Aquachem® is used for sealing concrete and cement based floors, brick and block walls to prevent moisture vapour transmission.

Characteristics/ Advantages

- Solvent free
- Water based, (non-toxic,) system that may be used in confined areas
- Suitable for most under floor heating systems.
- Suitable for skid resistant surfaces with the addition of various aggregates
- Hygienic coating for food preparation areas such as dairies , factories, warehouses, and is safe for aquatic life and potable water tanks
- Water Board certificated.

Tests

Approval/Standards
Water Board BS 6920

Product Data

Colours

| | |
|--------------------|---|
| Primer Base: | Part A: light straw yellow/clear liquid |
| Primer Hardener: | Part B: amber coloured liquid |
| Standard Top Coat: | Part A: grey liquid |
| Hardener: | Part B: amber coloured liquid |

Various top coat colours are available to BS shades, e.g., various blue shades for swimming pools.

Under direct sun radiation there may be some discolouration and colour deviation on certain colours. This has no influence on the performance of the coating

Packaging

4.5 lt Aquachem® Primer – base 1.65 kg, hardener 2.85kg (total 4.5kg)

5.0 lt Aquachem® Grey – base 3.2 kg, hardener 2.85 kg (total 6.0kg)

10 sq/m box set - primer base 0.8 hardener 1.42, 2 x grey base 1.6 kg, 2 x hardener 1.42 kg

Storage conditions/ Shelf Life

24 months from date of production when stored in original, unopened , undamaged containers at a temperature range between +5 and +25 degrees C

Store on pallets in order to insulate from concrete floors and protect from frost.

Density: Aquachem® Primer, when mixed,1.05, Aquachem® Grey when mixed, 1.200

Technical Data Chemical Base: Epoxy waterborne liquid

Chemical resistance

The cured Aquachem® system is resistant to short term spillages of the following:-

| TEST | CURED |
|--|-------|
| Chemical resistance: 24 hours, ASTM D 1308 | |
| Sodium Hydroxide, 50 percent | 10 |
| Ammonium Hydroxide | 10 |
| Hydrochloric Acid, concentrated | 10 |
| Sulphuric Acid, concentrated | 10 |
| Phosphoric Acid, concentrated | 10 |
| Acetic Acid, concentrated | 10 |
| Phenol | 10 |
| Acetone | 10 |
| Ethanol | 10 |
| Cumene | 10 |
| Acetic Acid, 60% | 10* |
| Sulphuric Acid, 80% | 10* |
| Xylene | 10 |
| Sugar Solutions | 10 |
| Sulphonated, Oil, Based Detergents | 10 |
| Petrol | 10 |
| Diesel Fuel | 10 |
| Methylated Spirits | 10 |
| White Spirits | 10 |
| Ammonia | 10 |
| Bleach | 10 |
| Ethylene Glycol anti-freeze | 10 |
| Mineral Oil | 10 |
| (5%) Citric Acid - Skydrol | 10 |

Chemical Resistance, 3 days' immersion*

KEY:

| | |
|---------------------|----------------------|
| 10 - No change | 2 - Partial failure |
| 8 - Slight change | 0 - Complete failure |
| 6 - Definite change | |

Thermal Resistance

| | |
|----------------------------------|-----------------------------------|
| Exposure | Dry Heat |
| Permanent | + 50 degrees C |
| Short term | + 80 degrees C |
| short term when exposure is only | occasional (during stem cleaning) |

System Information

Application Details: **Aquachem®** is used to reinforce cement screeds that are crumbling on the surface, If used as a **DPM** it can be used on moisture sensitive subfloors such as anhydrite, wood, granite and bituminous substrates etc, to prevent moisture from the leveling compound penetrating into the subfloor. **Aquachem®** can be used for sealing concrete and cement based floors, brick and block walls against moisture/vapour transmission

Consumption/Coverage

| Product | Smooth screeds | Textured screeds |
|-----------|-----------------|------------------|
| Primer | 4-5 sq/m per lt | 3-4 sq/m per ltr |
| Grey coat | 4-5 sq/m per lt | 2-3 sq/m per ltr |

Application Instructions

Mixing (Rotafix do not advise the splitting of standard packs)

Add the contents of Base A to the contents of the container Hardener Part B and mix well for 2 minutes until a uniform colour mix has been achieved

Mixing Tools

All Aquachem® 2-part systems must be mixed thoroughly using the recommended mixing paddle and low speed drill (150-450 rpm)

Application Method

Primer coat:

Following mixing of the 2 components this primer liquid material will be milky white. Empty the mixed liquid into a suitable paint tray. Wet the roller with the primer and make sure the main substrate. At corners and junctions revert to applying the mixed coating by brush. The milky white application will become translucent as the applied Aquachem® begins to cure.

Grey Top Coat(s):

Mix the 2 components as described for the primer coat. Place in a suitable paint tray, wet the roller with the grey top coat and repeat the application as described for the primer. Once the top coat is cured a subsequent coat may be applied repeating the same procedure.

To ensure adequate adhesion of any overlying surface treatment such as a cementitious screed, ensure there is a suitable angular aggregate lightly sprinkled/broadcast over the final coat of the wet Aquachem® system.

Cleaning of Tools

Clean all tools and application equipment with water immediately following use and prior to curing, n.b., hardened and/or cured material can only be removed by mechanical means

Pot life

Based on standard pack size/s – 4.5 lt pack of mixed primer and 5 lt mixed grey top coat

| Temperature | Time |
|---------------|---------|
| +10 degrees C | 90 mins |
| 20 degrees C | 60 mins |
| 30 degrees C | 30 mins |

Substrate Quality

The substrate must be clean, dry and free from all contaminants and deleterious substances such as dust and oil dirt, grease coatings and other if in doubt apply a sample of Aquachem® to a section of the substrate to be coated.

Substrate Preparation

Concrete substrates must be prepared mechanically using blast cleaning or scarifying equipment to remove cement laitance and provide a clean dust free surface

Application Conditions/Limitations

Applied **Aquachem®** must be protected against rain or humid conditions for a minimum of 15 hours, During application damp substrate may be tolerated, but **NOT** standing water.

The use of protective health and safety equipment and clothing is mandatory during the mixing and the use of Aquachem®

Substrate Temperature:

During Multi-Coat Application the times below are the minimum and maximum for applying each coat

| Substrate temperature | Minimum | Maximum |
|-----------------------|----------|----------|
| +10 degrees C | 48 hours | 48 hours |
| +20 degrees C | 24 hours | 48 hours |
| +30 degrees C | 12 hours | 48 hours |

The times in the table below are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity (RH). When the RH is > 75% the waiting time will be increased

Health and Safety Information:

NOTICE TO ROTAFIX ORIGINAL PURCHASE CUSTOMER: PLEASE ENSURE ALL POTENTIAL USERS OF THIS PRODUCT ARE AWARE OF THE MATERIAL SAFETY DATA SHEET (MSDS) PRIOR TO THE PRODUCTS USE. KEEP THE MSDS IN A SAFE PLACE READILY LOCATABLE IN CASE OF FUTURE USE. READ THE MSDS IN CONJUNCTION WITH ANY LABEL AND DIRECTIONS FOR USE ON THE PRODUCT CONTAINER. DESTROY ALL OBSOLETE COPIES RELATING TO THIS PRODUCT. THE MSDS RELATES ONLY TO THE PRODUCT SPECIFIED. COPIES OF THIS DOCUMENT ARE AVAILABLE ON REQUEST.

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