



#### PRODUCT DESCRIPTION

ADSEAL® Colour Hardener is a non-metallic, coloured, dry-shake, cementitious product for colouring and surface hardening freshly placed concrete.

It produces an attractive, uniformly coloured, dense, wear-resistant surface and is available in a wide range of colours [or uncoloured].

The product is chloride-free and contains pigments that are stable and colourfast in the presence of lime and sunlight (UV).

#### THE SYSTEM

##### SPECIAL PROPERTIES.

ADSEAL® Colour Hardener offers a decorative and interesting alternative to plain grey concrete. It is ideal for interior floors, architectural design projects, civic buildings, shopping areas and any projects requiring a coloured, decorative floor area with hard wearing properties.

Freshly placed concrete surfaces treated with ADSEAL® Colour Hardener may be trowelled to a smooth finish or given a light texture. The surface may also be imprinted to give the appearance of cobbles, pavers, setts, bricks, tiles, flagstones or other custom designs.

##### MAIN APPLICATIONS

DRIVEWAYS, ROADWAYS AND CARPARKS  
FOOTWAYS & PEDESTRIAN PRECINCTS  
HOTELS, GOLF CLUBS, CIVIC BUILDINGS, ETC.  
COMMERCIAL & INDUSTRIAL FLOOR SLABS

##### PERFORMANCE

ADSEAL Colour Hardener comes in two ranges: Regular for low to medium Trafficked areas [Driveways, paths, patios, etc.,] and Industrial for Medium to Heavy Trafficked areas [Industrial Slabs, Roadways, High footfall areas, etc.,]

With correct surface treatment [sealer] and correct maintenance regime the life could be almost indefinite as the surface treatment [sealer] effectively protects against wear, UV degradation & colour fade, etc..

We, therefore, recommend the use of an Adseal sealer and will be happy to advise on the most appropriate for specific usage.

Product information on all our sealers & protective coatings are available from our website or Office.

#### FEATURES/BENEFITS

- Ready to use Dry-shake application
- Available in a wide range of standard colours and custom colours to order
- Superior hardening characteristics for excellent performance
- Quality pigments for uniform, streak free finishes
- Dense, fade resistant surface
- Regular and Industrial Grades
- Industrial Grade independently tested to 'Special Grade' for Industrial Flooring.
- Can be applied by hand or machine

#### TECHNICAL DATA

Coverage :	Regular 3 - 5kgs per m <sup>2</sup> in two coats by hand Min 3kgs up to 5kgs for lighter colours or heavily trafficked areas
By machine:	Min 5kgs per m <sup>2</sup> by mechanical spreader
UV resistance:	Excellent
Storage:	Under cover, off the floor, unopened, in a dry, frost free environment.
Shelf life:	Approximately 12 months if stored correctly
Packaging:	25kg moisture resistant bags
Shipping	
Specification:	No significant hazard

#### USE WITH

- Adseal Concrete Sealer, Heavy Duty Sealer or Water based [eXtreme] Sealer.

#### SPECIFICATION CLAUSE

*The designated surface shall be coloured and hardened with Adseal Colour Hardener colour ..... ref ..... at a minimum rate of ..... Kgs per square metre as manufactured and supplied by Adseal, Units 17 – 18 Raikes Clough Industrial Estate, Raikes Lane, Bolton, BL3 1RP. All work to be carried out in accordance with the suppliers current 'Product Information' and 'Installation Instruction Sheet'*

**APPLICATION****SUB-BASE**

The sub-base should be graded to ensure a uniform thickness of concrete. It should be compacted, well-drained but moist, and completely free from standing water or frost.

**CONCRETE**

In accordance with good concrete practice, laying and curing of concrete in temperatures below 5°C should be avoided.

For most applications, the concrete should contain a minimum cement content of 325 kg per cubic metre. Aggregates must be non-reactive and if admixtures incorporated they must not contain chlorides or other ingredient that will cause "blooming" or affect the colour. Mix water should be kept to the minimum required for satisfactory placement and finishing of the concrete. The concrete must be protected from the elements at all stages. In windy conditions provide shelter to minimise the possibility of surface cracks.

After placing and compacting, concrete should be brought to an even surface using a wooden or mag float on small areas or by a power trowel fitted with a disc, to keep the surface "open" on larger areas

**HAND APPLICATION**

The colour hardener must be applied in two separate "shakes" at a minimum rate of 3 kg per square metre, depending on colour and application. Bags should be placed at intervals around the job, equivalent to the coverage rate.

The first application of two-thirds of the material should be broadcast by gloved hand in the "dry-shake" method over the surface of the concrete from a height of not more than half a metre - bridging is recommended for larger areas.

Float the colour hardener into the surface by wood or power float working edges first. Hard trowelling should be avoided at this stage. Follow immediately with the remaining colour hardener, applied by the same method, to any weak toned areas first until a complete uniform appearance is achieved.

When the second shake of colour hardener has been applied and floated in, the surface can be finished with a steel trowel. A more consistent finish is achieved by power trowelling.

Care must be taken to avoid over-trowelling as this may cause darkening or "burning" of the surface and may also cause a reduced slip resistance to the finished floor.

The colour hardener obtains moisture from the concrete matrix. To ensure that maximum strength and monolithic bonding occur, no additional water should be added at any stage.

**MACHINE APPLICATION**

ADSEAL® Industrial Colour Hardener is suitable for use with an approved mechanical spreader in conjunction with a laser screed. It should be placed on the concrete in one application at a minimum rate of 5 kg per square metre immediately after screeding.

**TECH SUPPORT**

We have extensive practical expertise and technical knowledge to share with you. Whether you are using our products for the first time, or an experienced installer or a professional Specifier with a technical query, please call us on +44 (0) 1204 523973 or email: [support@adsealcontracts.co.uk](mailto:support@adsealcontracts.co.uk) - we are here to help

**APPLICATION Continued****FINISHING**

Once ADSEAL® Colour Hardener has been applied, numerous patterns may be introduced by imprinting the surface with special mats or aluminium tools. If the colour hardened surface is to be imprinted with mat-type tools, ADSEAL® Colour Release must be used between the concrete surface and the mat, as a bond breaker. An antiqued, variegated patina can be achieved by applying the colour release in one or more contrasting colours. Application methods and more detailed information on ADSEAL® Colour Release can be found in its Technical Data Sheet. Where a flat, smooth trowelled surface is specified, attention should be given to ensure adequate slip resistant characteristics.

**CURING**

**Do not cure colour hardened concrete with plastic sheeting, hessian, curing waxes or similar products, as these will have an adverse effect on the colour.**

Concrete surfaces with variegated colours, including those where a contrasting colour release has been used, should be cured using nonstaining curing paper. ADSEAL® Colour Release alone is not sufficient as a curing membrane.

**SEALING**

Concrete surfaces with variegated colours should be sealed with ADSEAL® Concrete Sealer or Heavy Duty Sealer. The concrete should be free of excess colour release and sufficiently cured to minimise the likelihood of salts migrating to the surface and being trapped beneath the sealer. For optimum results, two coats should be applied at a rate of 5 - 8 square metres per litre, per coat. Refer to appropriate Data Sheet for full instructions before using .

For curing uniform, single colour surfaces, ADSEAL® Heavy Duty tinted should be used in a matching colour at a rate of 5 - 8 square metres per litre, per coat. A final sealing coat of ADSEAL® Heavy Duty should then be applied at the rate of 6 - 10 square metres per litre

In climates where a water based system is more appropriate or if specification demands, ADSEAL® eXtreme should be considered. Read relevant data sheets for full instructions.

**MAINTENANCE**

Colour hardened surfaces finished with ADSEAL® sealers require minimal maintenance, depending on the nature and specific use of the floor. Spills should be removed as they occur and the floor may be hosed down with an approved proprietary detergent. For further information on maintenance, please refer to the relevant Technical Data Sheet .

**HEALTH & SAFETY**

As with all cementitious products care must be taken when handling and in use.

Before using ADSEAL® Colour Hardener read Safety Data Sheet

Keep away from children and animals.