Polyaspartic High Visibility Coating

TECHNICAL DATA SHEET

AREAS OF USE

- Production Areas
- Warehouses
- Showrooms
- Workshops
- Loading bays
- Cold stores, walk-in fridges and freezers
- Interior and exterior

FEATURES

- Revolutionary, high performance, two part, polyaspartic resin formulation
- Exceptionally fast curing - apply 2 coats in one day to reduce downtime
- Extremely strong – easily copes with very heavy traffic
- Superior abrasion and scratch and resistance
- Can be applied at low temperatures as low as -10°C and as high as 25°C
- Excellent resistance to UV and weathering
- Superior performance demonstrated by ISO testing to CE Mark EN1504-2

DESCRIPTION

This is a new type of resin formulation that allows you to have your floor cleaned, prepared and painted within a single day.
Uniquely developed, this technology is a revolution in floor coatings that has only been made possible by recent developments in polyaspartic resin technology.
Our unique formulation uses this incredibly versatile resin to produce a high grade, high performance paint for heavily used areas both inside and outside.
It's also available in an anti slip finish. The anti slip particles are pre-blended (in the resin) which makes it easier to clean and to achieve a uniform finish.
Both the High Visibility Coating Polyaspartic Technology and Anti Slip versions carry CE Mark EN1504-2 and have impressive test results for abrasion and impact resistance, as well as for adhesion and hardness.

SPECIFICATION

Composition	High solids, polyaspartic resin.
Number of Components	1 x curing agent and 1 x resin.
Finish	Coloured, high gloss, smooth (anti slip also available).
Primer Required	Not usually. See section headed 'Priming'.
Number of Coats	2
Dry Film Thickness	85 microns.
Wet Film Thickness	100 microns.
Usage Interior/ Exterior	Interior & exterior.
Application Tools	Short pile roller. Cut in using a brush.
Minimum Application Temperature	Air temperature -10°C Floor temperature -10°C
Suitable For	Concrete, asphalt (3 months old), sand and cement screeds, well bonded paint, some metals and wood. The moisture content of concrete should be less than 75% RH.
Pack Size	2.5L
Coverage	25m² per coat onto a non-porous surface. 10-15m² onto a porous or textured surface. If applying in temperatures below 0°C coverage may be reduced.

Pot Life	15°C = 25 minutes. Less than 15°C = 30 minutes.
Mix Ratio (by weight)	20 parts curing agent : 100 parts resin.
Cleaning Tools	It is not practical to clean applicators and they should be discarded after use .
Shelf Life	12 months in unopened containers.
Cleaning	Normal industrial cleaners. Do not steam clean.
Storage	Between 15°C-25°C for at least 8 hours prior to use. Do not allow to freeze.
Principle Limitations Please contact us regarding applications not described here.	Do not apply to damp surfaces. When used outside, this coating will seal the substrate and in poorly drained areas puddling could occur potentially creating a slippery surface, in such case the Anti Slip Coating. Do not apply if rainfall is imminent. Most self-levelling compounds cannot be painted – please ask for details. Painting chequer paint can be a problem since coatings can wear prematurely off the 'high spots'.

COLOURS

- Light Grey
- Mid Grey
- Mid Blue
- Mid Green
- Tile Red

Samples are available on request.
While great care is taken with the colour samples shown, no guarantee can be given that they represent exactly the colours offered.

Curing Time	Recoat Time	Touch Dry	Light Traffic	Heavy Traffic	Full Chemical Resistance
-10°C	25 hours	16 hours	30 hours	72 hours	14 days
0°C	12 hours	8 hours	16 hours	30 hours	14 day
10°C	6 hours	4 hours	8 hours	16 hours	7 days
20°C	4 hours	2 hours	6 hours	16 hours	7 days

Light Traffic: Foot, trolley, pallet truck, occasional forklift.
Heavy Traffic: Regular forklift, heavy footfall, parked vehicles.

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TEST RESULTS

Abrasion Resistance ISO 5470-1

Taber test method expresses results in mg on a scale between 0mg (highest resistance) and 3000mg (lowest). A reading below 3000mg is a CE mark pass.

3000mg → 0mg
Lowest → Highest

Impact Resistance ISO 6272

Impact is expressed as Newton metres. Greater than 4 Nm is a CE mark pass.

Class 1 >4Nm
Class 2 >10Nm
Class 3 >20Nm

Scratch Resistance ISO 4586-2

Scratch resistance is measured using a Sclerometer and the resistance is measured in Newtons. 1N is the lowest resistance, 20N the highest.

1N → 20N
Lowest → Highest

Adhesion Test ISO 2409

Cross-Cut Test method. Class 0 is highest adhesion, Class 5 is lowest.

Class:
5 → 4 → 3 → 2 → 1 → 0
Lowest Highest

Adhesion Test EN 1542

Adhesion is expressed in MegaPascals (MPa) or Newton millimetres squared (Nmm ^{2}). Greater than 2 MPa is a CE mark pass.

>2MPa (Nmm^2)
= test pass

Wolff-Wilborn Hardness Test

Also known as the 'pencil test', a 9H reading is the measure of a hardest coating, HB is the softest.

HB → 9H
Least Hard → Hardest

Flexibility ISO 1519

Flexibility is measured using a Mandral Flex Tester, 2mm is the most flexible, 36mm the least.

36mm → 2mm
Lowest → Highest

Gloss Value

Rating is a 'Gloss Unit' measured on an Optical Glossmeter.

Matt 0-10%,
Low Sheen 10-25%,
Eggshell 26-40%,
Semi-Gloss 41-69%, Gloss 70-85%, High Gloss +85%

Chemical Resistance

Results shown are for tests with commonly used chemicals. Advice can be given for chemicals not listed here.

Petrol, diesel, fuel, methylated spirits, xylene, ammonia, white spirit, bleach, oil, anti-freeze, mineral hydraulic oil, caustic soda, detergents, sugar solutions.
At 5%: citric acid.

Water Permeability EN 1062-3

To achieve a CE mark, the measurement must be less than 0.1 kg/m ^{2}(24 h)$^{0.5}$

CE Marking
Critical Value:
< 0.1kg/m^2/(24 h)$^{0.5}$
W_1 → W_2 → W_3
Lowest Highest

Slip Resistance BS7976-2

The Pendulum Test Value (PTV) is measured in wet conditions.
A number above 36 indicates a 'low slip potential'.

High: 0-24 PTV
Moderate: 25-35 PTV
Low: 36+ PTV

STANDARD COMPLIANCE

EN 1504-2

This mark indicates that a coating has passed all the tests required to carry a CE mark.

BREEAM COMPLIANT

VOC LEVEL

ISO 16000

The 'Loi Grenelle' measurement of the effect of a product's VOC level within a building. A+ is the top safety rating.

REACH COMPLIANT

SURFACE PREPARATION:
Bare concrete – remove surface laitance, dust and any light dirt or grease deposits using appropriate cleaner. Flush with clean water and allow the surface to dry. For the removal of heavier deposits of oil and grease use appropriate cleaner, again, flush with clean water and allow the surface to dry.
New concrete – as a guide, new concrete should be left for eight weeks to dry. The surface should then be prepared using appropriate etch and cleaner and thoroughly rinsed away and left to dry prior to applying this coating.
Painted surfaces – abrade to remove any weak or loose paint and check remaining paint is well bonded. Remove grease and oil from painted surfaces. Use appropriate powerful degreaser for contaminated bare concrete, (do not use on a previously painted surface since it can soften paint).
Application in low temperatures – If applying in cold conditions the mixed components should be used immediately, and ideally stored in a warm room at least 8 hours prior to use.
Below 5°C it may be necessary to avoid processes which involve wetting the floor due to the difficulty in drying. A good sweep or mechanical brushing may be sufficient.
The viscosity will be somewhat thicker at very low temperatures, reducing coverage a little.
All surfaces must be -10°C or above and free from ice or water.
Priming – is not usually required, but for open textured, or very porous high suction surfaces, such as sand and cement screed, please speak to Cactus regarding an appropriate Primer to ensure a uniform finish and to prevent air entrapment bubbles. Very smooth or power floated concrete should also be primed.
Metal – remove any rust or flaking material by disc grinding or wire brushing. Apply the coating immediately after preparation to the clean metal surface. Grease or oil to be removed. Allow the metal to dry before coating.
Galvanised Metal – for advice, please contact our Technical Department.
Non-ferrous Metals – for advice, please contact our Technical Department.
Wood – must be sound, clean and dry. Unsuitable for ridged decking.

MIXING: Mix between 10°C and 25°C. Remove the two inner tins from the tall outer tin. Stir each tin thoroughly and pour all of the contents into the outer tin, (scrape around the inside of the tins to remove any residue). Mix the components together thoroughly using a spatula or similar wide bladed tool, (a piece of wooden batten is ideal). Continue mixing until an even colour and consistency are obtained. Do not mix more than one pack at a time. If a paint stirrer fitted to an electric drill is used, also use the spatula to blend in any unmixed material from the side and bottom of the tin. Do not dilute.

APPLIC ATION: Apply between -10°C and 25°C. Empty the mixed components into a paint tray and apply to the floor using a short pile roller, (not a medium pile or foam), 'working out' the coating into a thin paint film. A paint brush can be used for cutting in. Do not apply the paint too thickly since this will result in reduced coverage. A feature of polyaspartic coatings is that they should be applied as a thin film. If using Anti Slip, sprinkle the anti slip aggregate onto the wet first coat as you go and lightly re-roller. The second coat can be applied as soon as the first coat is dry (generally 4 hours at 20°C), and should be applied within 5 days. If more than 5 days elapse, the first coat should be slightly abraded, (or to avoid abrading, use one coat of Cold Set Primer) before the second coat is applied. Avoid washing the surface for 7 days.

SAFETY: Material Safety Data Sheets are available.

ORDERING:
All products are sold subject to the Company's Standard Conditions of Sale.
The Company and its representatives are often asked to comment on potential uses of products which differ from those described in the Company's data sheets. Whilst in such cases the Company and its representatives will always try to offer helpful and constructive advice, the Company cannot be held responsible for the results of such uses unless they are specifically confirmed in writing by Cactus Industrial.