ROBOTON

BARIL

825 ROBOTON PU BODYCOAT

An eggshell gloss high solids two component polyurethane coating for the durable protection and aesthetic finishing of concrete and cement surfaces in climatologic circumstances such as walls, floors and structural works.

FEATURES

- easy application;
- all concrete floor solution;
- a high abrasion resistance flooring technology;
- good colour retention;
- chemical resistance and mechanical strength;
- good filling properties;
- excellent application by brush, roller and spray devices.

WORKING PROCESS

Mixture:	825 Roboton PU Bodycoat Base component 4 parts by volume. Activator 903, 1 part by volume.
Mixing instructions:	Mix base component and activator intensively, preferably using a mechanical mixing device. The temperature of the mixed product should at least be 5°C during application.
Thinning:	The paint can be applied with various application devices. The necessary amount of PU5801 depends on used equipment, application method and temperature of the mixed product.
Potlife:	At 20°C 5 hours (mixed product).
Conditions during application:	The temperature of the substrate should be at least 3°C above dew point. Keep application area well ventilated during application and drying in order to reduce evaporated solvents. This is necessary to acquire good drying conditions and for the good of the applicators' health.
Method of application:	Preferably by means of roller and spray equipment.

PERFORMANCE AND PROPERTIES

Aesthetic product properties:

Gloss:	Eggshell gloss
Colour:	Standard colours (e.g. RAL, NCS), also lead free

Product properties:

Volume solids:	± 50 volume % (mixed product)
VOC:	≤ 460 gr/ltr.
Density:	At 20°C ± 1,30 kg/ltr. (mixed product)
Dry Film thickness:	Standard: 50-100 µm (depends on application process)
Theoretical coverage:	At a dry film thickness of 50 µm 10 m^2/ltr.
Practical coverage:	The performance in practice depends on various circumstances such as porosity and roughness of the substrate and material losses during application.
Heat resistance:	Maximum 120ºC (dry load)
Opacity:	To achieve best opacity of topcoat some colours need a special shade of primer. Please ask our technical department for advice.

Dry times: at 50% RH and standard dry film thickness of 50 µm (method: BYK Drying recorder)

	20°C
Dust free:	20 minutes
Manageable	4 hours
Recoatable:	4 hours (max. 7 days)

At a higher dry film thickness longer drying times should be taken in account. During drying and curing the relative humidity should remain below 80%.

PROCESSING DATA

	Airless spray	Airmix
Thinner	PU5801	PU5801
Quantity	ca. 15 vol. %	ca. 15 vol. %
Nozzle	min 0,013 inch	min 0,013 inch
Flow pressure	min 120 bar	min 80 bar
Dry film thickness	50-100 µm	50-100 µm

	Brush-roller
Thinner	S5102
Quantity	0-5 vol. %
Nozzle	
Flow pressure	
Dry film thickness	50 µm

Cleaning tools: Immediately after application using thinner PU5801.

PRODUCT INFORMATION

Packaging: 20 litre cans and 200 litre drums. Thinner in 25 litre jerry cans and 200 litre drums.

Shelf life: In original well shut packaging 12 months, stored inside at temperatures between 5°C and 40°C.

FLOOR REQUIREMENTS

The choice of the finish to be applied must also take the specific characteristics of the surface into account. In addition, the surface must satisfy several specific requirements before the finishing process is started:

The surface must be clean, dry and free of oil and grease. In other words, all foreign elements must be removed in order to facilitate the effective adhesion of the finishing layer. This may require a cleaning and/or preliminary treatment step.

The surface must be mechanically stable. In other words, the strength at the surface may not (noticeably) differ from the average strength. This is necessary to ensure long-term adhesion, particularly when subjected to mechanical and thermal loads. This prevents separation of the finishing layer together with the top layer of the substrate.

Whenever possible, 'upwards moisture penetration' must be prevented. In the case of new concrete floors, this can be realized by pouring the concrete on top of an impermeable foil. For concrete floors, the moisture content of the floor may not exceed 3% at the moment that a floor finish is applied which is impermeable to moisture.

PRE-TREATMENT

Concrete floors:

For new concrete floors, a laitance layer may be present on the surface, which will then have to be removed with the help of a light blasting procedure (particle-free) or the use of a cement remover or special acid cleaning agents. Depending upon the type of finish desired, monolithic concrete with a closed hardened top layer must be roughened up lightly to facilitate adhesion of the coating system. All the preliminary treatment methods mentioned above may be used for all old and contaminated or damaged concrete floors, in which case the specific method chosen will determine the thickness of the surface layer lost. Cracks in the floor can be caused by all kinds of factors and must be investigated further to determine, for example, whether it is necessary to consider measures such as injections, dilatations etc..

ENVIRONMENT AND HEALTH

Labelling: In accordance with EU directions 67/548/EEG and in accordance with directives on hazardous materials. Harmful and irritating in contact with skin, eyes and by inhalation. In case of eye contact, immediately wash with large amounts of water and contact a medical expert. Do not eat, drink or smoke during application.

UN: 1263

Aware code: 43-IV

AWARE

The AWARE (acronym for Adequate Warning and Air Requirement) is a coding system for products containing volatile organic compounds (VOC), a tool for product manufacturers to support risk assessment and product innovation. Additionally it can be used for hazard communication with end-users to inform them about potential health risks of hazardous products. The system is based on the Norwegian concept for the OAR (Occupational Air Requirement) and the Danish concept for the MAL-code system. The AWARE code consist of two digits separated by a hyphen. Both digits are elaborated based on physical-chemical considerations and adapted to the European Dangerous Preparations Directive. The first digit is expressed as m3 required fresh air at the workplace to dilute the emissions from one litre used product to be sure not to exceed the level of the Occupational Exposure Limit (OEL). It is based on the component content, vapour pressure, solubility and toxicity. The second digit is derived from R phrases ascribed to the substances in the product. In this way the AWARE is a tool that can be used for risk identification of products as well as ingredients in products. A higher AWARE does indicate a higher risk. It is a perfect tool to support substitution of hazardous products.

PRE-TREATMENT

Preliminary treatment of floor:

The preliminary treatment of a floor needed to ensure a good finish can be realized physically, chemically or mechanically. The type of treatment chosen or combination of such treatments will depend upon the presence of foreign contaminants, the stability, and the nature of the floor substrate. Physical cleaning processes are carried out with the help of solvents/stripping agents, which can be used for example to remove paint and/or glue residues. Chemical pre-treatment includes the removal of all types of contaminants with the help of neutral, acidic or alkaline cleaning agents, which may or may not be combined. This also includes the use of acid to etch out the surface and thereby increase the surface pore volume and improve future adhesion. Mechanical pre-treatment refers to sanding, cutting or roughing up the surface in order to remove the contaminated or weaker top layer of substrate. Various methods are available for achieving this including sanding, very high-pressure water jetting, grit blasting (dry) and sandblasting (wet).

PROTECTIVE COATINGS

Our 'protective coatings' excel by virtue of their durability, flexibility, adhesion, easy application, anti-corrosion, and chemical and mechanical resistance. This is the result of our vast competence in coating chemistry, combined with a good eye for our client's requirements and wishes. The coating systems conform to ISO 12944 and comply with international VOC guidelines.

PAINT SYSTEMS

Please find below a few paint systems based on 825 Roboton PU Bodycoat. For customized advice on paint systems please contact Baril Coatings, or our local sales representative.

System 1 Refinish

Top coat 50 µm;
825 Roboton PU Bodycoat

System 2 Concrete surface:

1st coat 60 µm;
831 Roboton EP Primer

Top coat 60 µm;
825 Roboton PU Bodycoat

TOUCH UP

Touching up of damages or untreated parts of the surface. Remove grease, oil, dirt etc. using an appropriate cleansing agent, for instance ENVICLEAN PR (for use see product sheet). Roughen the surface, various methods are available for achieving this including sanding, very high-pressure water jetting, grit blasting (dry) and sandblasting (wet).

Smooth the transition of cleansed parts to parts with intact coats of paint by sanding and scraping.

After sanding, remove all dust from the entire surface with compressed air which is free of moisture and grease. Then touch up the object with the entire paint system, as described in this paint advice.

Touch up light surface damages only with the product of the top coat, as described in the paint advice.

MAINTENANCE

It is recommended to clean the surface regularly and to inspect the coats of paint for defects annually.
Touch up any defects with the original paint system.

TECHNICAL SUPPORT

Baril Coatings B.V. offers more than just advice. We offer a total service solution to the principal, the architect, the main contractor and the painting contractor.

In order to ensure the required performance in terms of durability, Baril Coatings offers full technical support and supervision during implementation and completion of the application process, all in accordance with the ISO 12944 guideline.

The supervision and support provided by Baril Coatings does not relieve the painting contractor of his responsibility for the work carried out by him. The painting contractor must thoroughly familiarize himself with the most recently updated product data sheets and the general terms and conditions of Baril Coatings for protective coatings on steel. Baril Coatings is not responsible for application and the application conditions. The final durability depends mainly on factors that are outside our control and for that reason we cannot accept any liability.