

# SOLS INDUSTRIELS CEMENTITIOUS FLOORING & CONCRETE HARDENERS INDUSTRIEFUßBODEN

Rocland Produits - Products - Produkte



ROCLAND

*Resistant everywhere*

# Hardeners

# QUALITOP MILLENIUM

## Very heavy duty floor hardener.

Rocland  
Range



### Product description

*Qualitop Millenium* is a synthetic dry shake hardener. *Qualitop Millenium* consists of very hard aggregates, cement and special additives.

*Qualitop Millenium* can be applied to freshly laid concrete as a dry powder or as a slurry.

### Colour range

Refer to Rocland colour guide.

### Benefits

- **High performance** wearing shield
- Excellent impact resistance and point load
- Dust proof
- Non-rusting – surface requires no special treatment

### Uses

- Very heavy duty industrial floors
- Freight terminals
- Logistics platforms - VNA flat floors
- Railway workshops
- Aircraft hangars
- Heavy engineering works
- Military applications
- Power stations
- Waste and water treatment plants

### Technical specifications

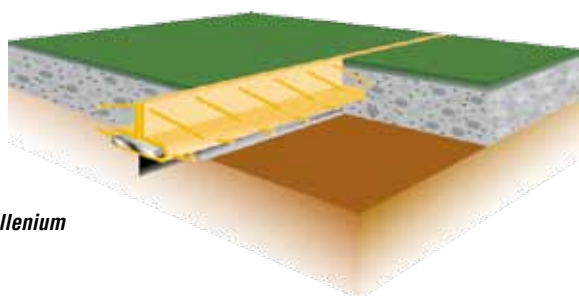
*Qualitop Millenium* conforms to the requirements of EN 13813 screed materials.

**Compressive strength:**  $\geq 80 \text{ N/mm}^2$   
EN 13892-2

**Flexural strength:**  $\geq 10 \text{ N/mm}^2$   
EN 13892-2

**Abrasion resistance:**  $\leq 1,5 \text{ cm}^3 / 50 \text{ cm}^2$   
EN 13892-3

**Abrasion resistance:** conforms to BS 8204 'AR<sub>0,5</sub>' class  
EN 13892-4



■ **Qualitop Millenium**

■ **Support**

A ready-to-use factory premixed floor hardener used in the making of concrete floors. **Qualitop Millenium** consists of very hard aggregates, cement and special additives. **Qualitop Millenium** can be applied to freshly laid concrete as a dry powder or as a slurry.

## Method statement

### Concrete quality

New concrete should be formulated with a minimum cement content of 300 kg per m<sup>3</sup> of concrete and with an aggregate suitable for the intended purpose. Plasticizers should be included to improve workability.

Concrete air entrained must be lower than 3%.

**Qualitop Millenium** should be applied onto the concrete as soon as it will support the weight of a man (the foot-print test). This will normally be after 4-12 hours depending on the weather conditions.

### Preparation

Large areas of concrete should be laid using a laser screed. For smaller areas the use of a rake and straight edges will provide a suitable even surface.

### Application of Qualitop Millenium

**Qualitop Millenium** is applied to new freshly laid concrete by dry shaking or as a 'fresh on fresh' topping.

#### • Dry shake application

- For optimum results sprinkling should take place in two stages when applied manually. When applied using a mechanical spreader a single application is sufficient.
- Manually for the first sprinkle coat **Qualitop Millenium** should be spread evenly over the surface at a rate of 2 to 3.5 kg/m<sup>2</sup>. Using a mechanical spreader **Qualitop Millenium** should be spread evenly over the surface at a rate of 8 to 12 kg/m<sup>2</sup>.
- Once this application of **Qualitop Millenium** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.
- Immediately after the first power float is complete the second manual application of **Qualitop Millenium** should be spread evenly over the surface at a rate of 2 to 3.5 kg/m<sup>2</sup>.
- Once the second application of **Qualitop Millenium** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.
- A smooth, hard finish is then achieved by use of a power float equipped with finishing blades.

#### • 'Fresh on fresh' topping

- **Qualitop Millenium** is mixed with water at a rate of 3 to 3.5 litres per 25 kg bag in a pan mixer or any suitable mortar mixer until a homogeneous slurry is obtained.
- The slurry is then poured onto the surface of the concrete at a minimum rate of 12 kg/m<sup>2</sup> and levelled to the

required thickness using straight edges.

- The **Qualitop Millenium** should then be floated using hand trowels for edges and corners and power floats for the main surface.
- A smooth, hard finish is then obtained by use of a power float equipped with finishing blades.

### Application of Roc Cure

- The curing agent **Roc Cure** should be applied immediately after the finishing operation is complete. It is applied using a low pressure spray apparatus evenly over the entire surface at a rate of 100 g/m<sup>2</sup>.
- It is essential that the curing process be well advanced before the floor is put into service. The following delays must be observed:

pedestrian traffic	7 days
light traffic	14 days
full use (fork lifts etc)	28 days

### Coverage

The floor hardener shall be **Qualitop Millenium** applied at a rate of:

- 4 to 7 kg/m<sup>2</sup> dry shaking
- 8 to 12 kg/m<sup>2</sup> mechanical spreader
- 12 kg/m<sup>2</sup> 'fresh on fresh' topping

The curing agent shall be **Roc Cure** applied at a rate of 100 g/m<sup>2</sup>.

### Packaging

**Qualitop Millenium** is packed in 25 kg bags. When stored under cover in dry conditions the shelf life is 6 months. Once opened the contents of a bag must be used immediately.

A guide to the maintenance of **Roc** floors is available on request.

### Health and safety

As with all powder products the wearing of a dust mask and gloves is advised.

(See our Material Safety Data Sheet for full details).

#### Note :

The screed properties under site conditions cannot always be directly comparable with the screed material properties obtained under laboratory conditions, due for instance to variations of mixing, compaction or curing.





# ROCLAND

## Qualitop Metal

### Impact resistant heavy duty floor hardener

#### Product description

*Qualitop metal* is a metallic dry shake floor hardener. *Qualitop metal* consists of specially treated malleable iron aggregates, cement and selected additives and workability aids.

*Qualitop metal* is normally applied to freshly laid concrete.

#### Colour range

Refer to Rocland colour guide.

#### Benefits

- **High Performance** topping
- Excellent impact resistance
- Dust proof
- Anti-static performance - spark resistance

#### Uses

- Very heavy duty industrial floors
- Freight terminals
- Foundries
- Railway workshops
- Aircraft hangars
- Heavy engineering works
- Military applications
- Cable works

#### Technical specifications

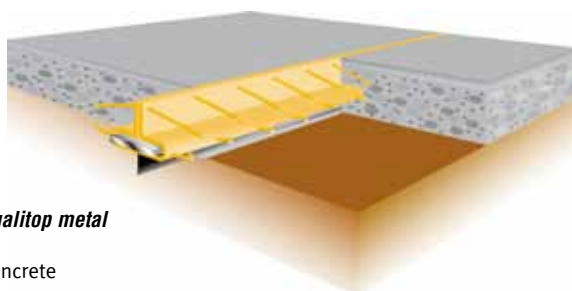
*Qualitop metal* conforms to the requirements of EN 13813 screed materials.

**Compressive strength:**  $\geq 80 \text{ N/mm}^2$   
EN 13892-2

**Flexural strength:**  $\geq 10 \text{ N/mm}^2$   
EN 13892-2

**Abrasion resistance:**  $\leq 3 \text{ cm}^3 / 50 \text{ cm}^2$   
EN 13892-3

**Abrasion resistance:** conforms to BS 8204 'AR<sub>0,5</sub>' class  
EN 13892-4



■ *Qualitop metal*  
■ Concrete

# Qualitop Metal

A ready-to-use factory premixed floor hardener used in the making of concrete floors. **Qualitop metal** consists of specially treated ductile metal wool, a hydraulic binder and special additives. **Qualitop** is normally to freshly laid concrete as a slurry.

## Method statement

### Concrete quality

New concrete should be formulated with a minimum cement content of 300 kg per m<sup>3</sup> of concrete and with an aggregate suitable for the intended purpose. Plasticizers should be included to improve workability.

Concrete air entrained must be lower than 3%.

**Qualitop metal** should be applied onto the concrete as soon as it will support the weight of a man (the foot-print test). This will normally be after 4-12 hours depending on the weather conditions.

### Preparation

Large areas of concrete should be laid using a laser screed. For smaller areas the use of a rake and straight edges will provide a suitable even surface.

### Application of Qualitop metal

**Qualitop metal** is applied to new freshly laid concrete by dry shaking or as a 'fresh on fresh' topping.

#### • Dry shake application

- For optimum results sprinkling should take place in two stages when applied manually. When applied using a mechanical spreader a single application is sufficient.
- Manually for the first sprinkle coat **Qualitop metal** should be spread evenly over the surface at a rate of 2 to 3,5 kg/m<sup>2</sup>. Using a mechanical spreader **Qualitop metal** should be spread evenly over the surface at a rate of 8 to 12 kg/m<sup>2</sup>.
- Once this application of **Qualitop metal** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.
- Immediately after the first power float is complete the second manual application of **Qualitop metal** should be spread evenly over the surface at a rate of 2 to 3,5 kg/m<sup>2</sup>.
- Once the second application of **Qualitop metal** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.
- A smooth, hard finish is then achieved by use of a power float equipped with finishing blades.

#### • 'Fresh on fresh' topping

- **Qualitop metal** is mixed with water at a rate of 3.5 to 4 litres per 25 kg bag in a pan mixer or any suitable mortar mixer until a homogeneous slurry is obtained.
- The slurry is then poured onto the surface of the concrete at a minimum rate of 12 kg/m<sup>2</sup> and levelled to the required

thickness using straight edges.

- The **Qualitop metal** should then be floated using hand trowels for edges and corners and power floats for the main surface.
- A smooth, hard finish is then obtained by use of a power float equipped with finishing blades.

### Application of Roc Cure

- The curing agent **Roc Cure** should be applied immediately after the finishing operation is complete. It is applied using a low pressure spray apparatus evenly over the entire surface at a rate of 100 g/m<sup>2</sup>.
- It is essential that the curing process be well advanced before the floor is put into service. The following delays must be observed:

pedestrian traffic	7 days
light traffic	14 days
full use (fork lifts etc)	28 days

### Coverage

The floor hardener shall be **Qualitop metal** applied at a rate of:

- 6 to 8 kg/m<sup>2</sup> dry shaking
- 8 to 12 kg/m<sup>2</sup> mechanical spreader
- 15 kg/m<sup>2</sup> 'fresh on fresh' topping

The curing agent shall be **Roc Cure** applied at a rate of 100 g/m<sup>2</sup>.

**When applied outside or in wet places, the surface of Qualitop metal may oxidize which will detract from its appearance.**

### Packaging

**Qualitop metal** is packed in 25 kg bags. When stored under cover in dry conditions the shelf life is 6 months. Once opened the contents of a bag must be used immediately.

A guide to the maintenance of Roc floors is available on request.

### Health and safety

As with all powder products the wearing of a dust mask and gloves is advised.

(See our Material Safety Data Sheet for full details).

#### Note :

The screed properties under site conditions cannot always be directly comparable with the screed material properties obtained under laboratory conditions, due for instance to variations of mixing, compaction or curing.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.rocland.eu](http://www.rocland.eu)  
[contact@rocland.eu](mailto:contact@rocland.eu)



**ROCLAND**

# Qualitop Master

## High-performance attractive-looking coloured wearing course for industrial floors



### Product description

*Qualitop master* is a coloured hardener to be applied only in slurry form. It comprises mineral and hard synthetic aggregates selected additives and workability aids.

### Colours

Available in 14 colours.  
See colour chart for more details.

### Properties

- Excellent resistance to abrasion
- Excellent resistance to traffic
- Attractive appearance - light reflective
- Static disseminating.

### Uses

- Workshops - superflat floors
- Exhibition halls
- Multipurpose halls
- Individual dwellings
- General industrial use
- High-rise storage

### Technical specifications

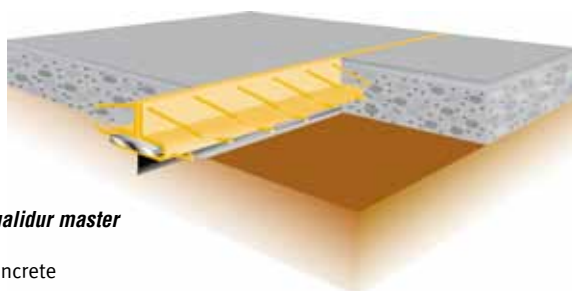
*Qualitop master* meets the requirements of the regulations in force (EN 13813, screed materials).

**Compressive strength:**  $\geq 70 \text{ N/mm}^2$   
EN 13892-2

**Flexural strength:**  $\geq 8 \text{ N/mm}^2$   
EN 13892-2

**Abrasion resistance:**  $\leq 5 \text{ cm}^3 / 50 \text{ cm}^2$   
EN 13892-3

**Abrasion resistance:** conforms to BS 8204 'ARo,5' class  
EN 13892-4



■ *Qualitop master*

■ Concrete

# Qualitop Master

**Qualitop master** is a ready-to-use surface hardener. It is used solely as a fresh-on-fresh topping.

## Directions for use

### Preparation of the concrete base

The wearing course is laid on a slab or area of pavement whose thickness is determined by the nature of the ground and the loadings to be applied to it.

Plasticisers may be added to improve the workability of the concrete. Concrete air entrained must be lower than 3%. The slurry is applied as soon as the concrete starts to set, after smoothing or sweeping the surface so that the hardener is perfectly integrated with the supporting layer.

### Required preparation

Small and medium areas should be levelled with smoothing planks. For large areas we recommend the use of a Laser Screed.

### Application of the Qualitop master wearing course

#### • Preparation of the fresh-on-fresh topping

- Mix 3 to 3.5 litres water with one 25 kg bag of **Qualitop master** in a vertical mixer (concrete mixer) until a homogeneous paste with good plasticity (slurry) is obtained.

**NB:** High quality in the final result can be obtained only as follows. Mechanical spraying is not permitted.

- Spread the slurry by squeegee or smoothing plank within formwork of the desired thickness, using at least 12 kg/m<sup>2</sup>.
- When the coating begins to set, edges and corners should be smoothed by hand and the main surface by power trowel.
- Polishing should be done with power finishing trowels. Use Teflon® trowels when finishing surfaces with the lightest colours (ivory, salmon, white) to avoid burning the surface.

## Curing compound

- **Roc Cure** must be sprayed immediately after finishing work is complete over the entire surface area.
- The concrete must be fully set before the floor can be used. It is essential that the following time limits are observed:

pedestrian traffic	7 days
light traffic	14 days
full use (fork lifts etc)	28 days

## Consumption

**Qualitop master** must be applied at a rate of at least 12 kg/m<sup>2</sup> per fresh-on-fresh topping.

**Roc Cure** must be sprayed at a rate of at least 100 g/m<sup>2</sup>. Refer to **Roc Cure** data sheet.

## Packaging

**Qualitop master** is supplied in 25 kg bags.

FIBC bulk packaging is possible on request for projects using mobile mixers. The contents of the “big bag” can be matched to the capacity of the mixer (maximum 1,000 kg).

If kept in the original packing, protected from damp and bad weather, in a dry place, their storage life is the same as for cement (6 months). Use the products immediately once opened.

## Health and safety

As **Qualitop master** is a powdered product, we recommend the wearing of a safety mask when it is being used.

(Safety data sheet available on request).

## Recommendations

Be careful with the protection and repair of joints.

Clean and look after the wearing course regularly (see guide on floor maintenance).

### Note :

The screed properties under site conditions cannot always be directly comparable with the screed material properties obtained under laboratory conditions, due for instance to variations of mixing, compaction or curing.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.rocland.eu](http://www.rocland.eu)  
[contact@rocland.eu](mailto:contact@rocland.eu)



# ROCLAND

## Qualidur HP High performance floor shield

### Product description

*Qualidur High Performance* is a factory blend of selected, optimally graded and shaped aggregates, cement and additives.

*Qualidur High Performance* has been specially developed to provide very good abrasion resistance to industrial floors.

### Colour range

Refer to Rocland colour guide.

### Benefits

- Non rusting
- Static disseminating
- Light reflective
- Fibre suppressant and smooth finish
- Hard wearing and easy to seal
- Resistant to oils and hydrocarbons
- Dust proof
- Non-rusting – surface requires no special treatment

### Uses

- Logistics flat floors
- Distributions facilities
- Food processing plants
- Medium duty industrial floors
- Workshops
- Retail commercial outlets

### Technical specifications

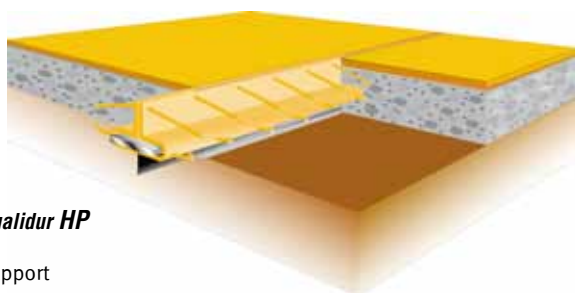
*Qualidur High Performance* conforms to the requirements of EN 13813 screed materials.

**Compressive strength:**  $\geq 80 \text{ N/mm}^2$   
EN 13892-2

**Flexural strength:**  $\geq 10 \text{ N/mm}^2$   
EN 13892-2

**Abrasion resistance:**  $\leq 3 \text{ cm}^3 / 50 \text{ cm}^2$   
EN 13892-3

**Abrasion resistance:** conforms to BS 8204 'AR1' class  
EN 13892-4



■ Qualidur HP

■ Support

# Qualidur HP

A ready-to-use factory premixed floor hardener used in the making of concrete floors. **Qualidur HP** consists of graded quartz sands, selected hard wearing mineral aggregates, a hydraulic binder and special additives.

**Qualidur HP** can be applied to freshly laid concrete as a dry powder or as a slurry.

## Method statement

### Concrete quality

New concrete should be formulated with a minimum cement content of 300 kg per m<sup>3</sup> of concrete and with an aggregate suitable for the intended purpose. Plasticizers should be included to improve workability.

Concrete air entrained must be lower than 3%.

**Qualidur HP** should be applied onto the concrete as soon as it will support the weight of a man (the foot-print test). This will normally be after 4-12 hours depending on the weather conditions.

### Preparation

Large areas of concrete should be laid using a laser screed. For smaller areas the use of a rake and straight edges will provide a suitable even surface.

### Application of Qualidur HP

**Qualidur HP** is applied to new freshly laid concrete by dry shaking or as 'fresh on fresh' topping.

#### • Dry shake application

- For optimum results sprinkling should take place in two stages when applied manually. When applied using a mechanical spreader a single application is sufficient.

- Manually for the first sprinkle coat **Qualidur HP** should be spread evenly over the surface at a rate of 2 to 3.5 kg/m<sup>2</sup>.

Using a mechanical spreader **Qualidur HP** should be spread evenly over the surface at a rate of 8 to 12 kg/m<sup>2</sup>.

- Once this application of **Qualidur HP** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.

- Immediately after the first power float is complete the second manual application of **Qualidur HP** should be spread evenly over the surface at a rate of 2 to 3.5 kg/m<sup>2</sup>.

- Once the second application of **Qualidur HP** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.

- A smooth, hard finish is then achieved by use of a power float equipped with finishing blades. For light colours stainless steel blades should be used.

#### • 'fresh on fresh' topping

- **Qualidur HP** is mixed with water at a rate of 3 to 3.5 litres per 25 kg bag in a pan mixer or any suitable mortar mixer until a homogeneous slurry is obtained.

- The slurry is then poured onto the surface of the concrete at a minimum rate of 12 kg/m<sup>2</sup> and levelled to the required thickness using straight edges.

- The **Qualidur HP** should then be floated using hand trowels for edges and corners and power floats for the main surface.

- A smooth, hard finish is then obtained by use of a power float equipped with finishing blades.

### Application of Roc Cure

• The curing agent **Roc Cure** should be applied immediately after the finishing operation is complete. It is applied using a low pressure spray apparatus evenly over the entire surface at a rate of 100 g/m<sup>2</sup>.

• It is essential that the curing process be well advanced before the floor is put into service. The following delays must be observed:

pedestrian traffic	7 days
light traffic	14 days
full use (fork lifts etc)	28 days

## Coverage

The floor hardener shall be **Qualidur HP** applied at a rate of:

- 4 to 7 kg/m<sup>2</sup> dry shaking
- 8 to 12 kg/m<sup>2</sup> mechanical spreader
- 12 kg/m<sup>2</sup> 'fresh on fresh' topping

The curing agent shall be **Roc Cure** applied at a rate of 100 g/m<sup>2</sup>.

## Packaging

**Qualidur HP** is packed in 25 kg bags. When stored under cover in dry conditions the shelf life is 6 months. Once opened the contents of a bag must be used immediately.

A guide to the maintenance of **Roc** floors is available on request.

## Health and safety

As with all powder products the wearing of a dust mask and gloves is advised.

(See our Material Safety Data Sheet for full details).

### Note :

The screed properties under site conditions cannot always be directly comparable with the screed material properties obtained under laboratory conditions, due for instance to variations of mixing, compaction or curing.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.rocland.eu](http://www.rocland.eu)  
[contact@rocland.eu](mailto:contact@rocland.eu)



# ROCLAND

## Qualidur Medium to heavy duty floor hardener

### Product description

*Qualidur* is a mineral dry shake hardener. *Qualidur* consists of graded silica sand, selected hard wearing mineral aggregates, cement and special additives.

*Qualidur* is normally applied to freshly laid concrete.

### Colour range

Refer to Rocland colour guide.

### Benefits

- Fibre suppressant and smooth finish
- Hard wearing and easy to seal
- Resistant to oils and hydrocarbons
- Dust proof
- Non-rusting – surface requires no special treatment

### Uses

- Medium duty industrial floors
- Exhibition halls
- Warehouses and loading bays
- DIY and Cash & Carry stores
- Workshops

### Technical specifications

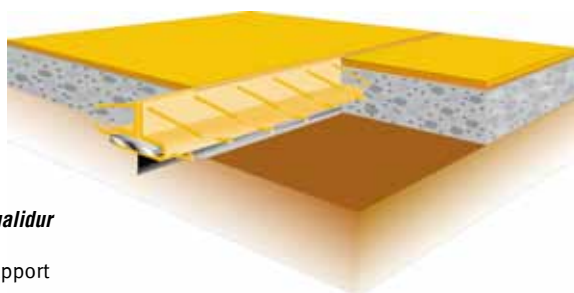
*Qualidur* conforms to the requirements of EN 13813 screed materials.

**Compressive strength:**  $\geq 70 \text{ N/mm}^2$   
EN 13892-2

**Flexural strength:**  $\geq 8 \text{ N/mm}^2$   
EN 13892-2

**Abrasion resistance:**  $\geq 5 \text{ cm}^3 / 50 \text{ cm}^2$   
EN 13892-3

**Abrasion resistance:** conforms to BS 8204 'AR1' class  
EN 13892-4



■ **Qualidur**  
■ **Support**

# Qualidur

A ready-to-use factory premixed floor hardener used in the making of concrete floors. **Qualidur** consists of graded quartz sands, selected hard wearing mineral aggregates, a hydraulic binder and special additives.

**Qualidur** can be applied to freshly laid concrete as a dry powder or as a slurry.

## Method statement

### Concrete quality

New concrete should be formulated with a minimum cement content of 300 kg per m<sup>3</sup> of concrete and with an aggregate suitable for the intended purpose. Plasticizers should be included to improve workability.

Concrete air entrained must be lower than 3%.

**Qualidur** should be applied onto the concrete as soon as it will support the weight of a man (the foot-print test). This will normally be after 4-12 hours depending on the weather conditions.

### Preparation

Large areas of concrete should be laid using a laser screed. For smaller areas the use of a rake and straight edges will provide a suitable even surface.

### Application of Qualidur

**Qualidur** is applied to new freshly laid concrete by dry shaking or as 'fresh on fresh' topping.

#### • Dry shake application

- For optimum results sprinkling should take place in two stages when applied manually. When applied using a mechanical spreader a single application is sufficient.
- Manually for the first sprinkle coat **Qualidur** should be spread evenly over the surface at a rate of 2 to 3.5 kg/m<sup>2</sup>. Using a mechanical spreader **Qualidur** should be spread evenly over the surface at a rate of 8 to 12 kg/m<sup>2</sup>.
- Once this application of **Qualidur** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.
- Immediately after the first power float is complete the second manual application of **Qualidur** should be spread evenly over the surface at a rate of 2 to 3.5 kg/m<sup>2</sup>.
- Once the second application of **Qualidur** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.
- A smooth, hard finish is then achieved by use of a power float equipped with finishing blades. For light colours stainless steel blades should be used.

#### • 'fresh on fresh' topping

- **Qualidur** is mixed with water at a rate of 3 to 3.5 litres per 25 kg bag in a pan mixer or any suitable mortar mixer until a homogeneous slurry is obtained.
- The slurry is then poured onto the surface of the concrete at a minimum rate of 12 kg/m<sup>2</sup> and levelled to the required thickness using straight edges.
- The **Qualidur** should then be floated using hand trowels

for edges and corners and power floats for the main surface.

- A smooth, hard finish is then obtained by use of a power float equipped with finishing blades.

### Application of Roc cure

- The curing agent **Roc Cure** should be applied immediately after the finishing operation is complete. It is applied using a low pressure spray apparatus evenly over the entire surface at a rate of 100 g/m<sup>2</sup>.
- It is essential that the curing process be well advanced before the floor is put into service. The following delays must be observed:

pedestrian traffic	7 days
light traffic	14 days
full use (fork lifts etc)	28 days

## Coverage

The floor hardener shall be **Qualidur** applied at a rate of:

- 4 to 7 kg/m<sup>2</sup> dry shaking
- 8 to 12 kg/m<sup>2</sup> mechanical spreader
- 12 kg/m<sup>2</sup> 'fresh on fresh' topping

The curing agent shall be **Roc Cure** applied at a rate of 100 g/m<sup>2</sup>.

A premium **HP** grade is available where higher mechanical properties are required.

## Packaging

**Qualidur** is packed in 25 kg bags. When stored under cover in dry conditions the shelf life is 6 months. Once opened the contents of a bag must be used immediately.

A guide to the maintenance of **Roc** floors is available on request.

## Health and safety

As with all powder products the wearing of a dust mask and gloves is advised.

(See our Material Safety Data Sheet for full details).

### Note :

The screed properties under site conditions cannot always be directly comparable with the screed material properties obtained under laboratory conditions, due for instance to variations of mixing, compaction or curing.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.rocland.eu](http://www.rocland.eu)  
[contact@rocland.eu](mailto:contact@rocland.eu)



# ROCLAND

## Qualiroc

### Light to medium duty floor hardener.

#### Product description

A ready-to-use factory premixed floor hardener used in the finishing of concrete floors. *Qualiroc* consists of graded quartz sand, a hydraulic binder and special additives.

*Qualiroc* is normally applied to freshly laid concrete.

#### Colour range

Refer to Rocland colour guide.

#### Benefits

- Cost effective
- Hard wearing
- Dust proof
- Non-rusting – surface requires no special treatment

#### Uses

- Light to medium duty industrial floors
- Shops and stores
- Warehouses
- Workshops

#### Technical specifications

*Qualiroc* conforms to the requirements of EN 13813 screed materials.

**Compressive strength:**  $\geq 50 \text{ N/mm}^2$   
EN 13892-2

**Flexural strength:**  $\geq 6 \text{ N/mm}^2$   
EN 13892-2

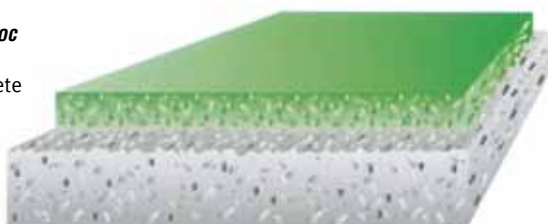
**Abrasion resistance:**  $\geq 5 \text{ cm}^3 / 50 \text{ cm}^2$   
EN 13892-3

**Abrasion resistance:** conforms to BS 8204 'AR2' class  
EN 13892-4



■ *Qualiroc*

■ Concrete



# Qualiroc

A ready-to-use factory premixed floor hardener used in the making of concrete floors. **Qualiroc** consists of graded quartz sand, a hydraulic binder and special additives.

**Qualiroc** can be applied to freshly laid concrete as a dry powder or as a slurry.

## Method statement

### Concrete quality

New concrete should be formulated with a minimum cement content of 300 kg per m<sup>3</sup> of concrete and with an aggregate suitable for the intended purpose. Plasticizers should be included to improve workability.

Concrete air entrained must be lower than 3%.

**Qualiroc** should be applied onto the concrete as soon as it will support the weight of a man (the foot-print test). This will normally be after 4-12 hours depending on the weather conditions.

### Preparation

Large areas of concrete should be laid using a laser screed. For smaller areas the use of a rake and straight edges will provide a suitable even surface.

### Application of Qualiroc

**Qualiroc** is applied to new freshly laid concrete by dry shaking or as a 'fresh on fresh' topping.

#### • Dry shake application

- For optimum results sprinkling should take place in two stages when applied manually. When applied using a mechanical spreader a single application is sufficient.
- Manually for the first sprinkle coat **Qualiroc** should be spread evenly over the surface at a rate of 2 to 3.5 kg/m<sup>2</sup>. Using a mechanical spreader **Qualiroc** should be spread evenly over the surface at a rate of 8 to 12 kg/m<sup>2</sup>.
- Once this application of **Qualiroc** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.
- Immediately after the first power float is complete the second manual application of **Qualiroc** should be spread evenly over the surface at a rate of 2 to 3.5 kg/m<sup>2</sup>.
- Once the second application of **Qualiroc** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.
- A smooth, hard finish is then achieved by use of a power float equipped with finishing blades. For light colours stainless steel blades should be used.

#### • 'Fresh on fresh' topping

- **Qualiroc** is mixed with water at a rate of 3 to 3.5 litres per 25 kg bag in a pan mixer or any suitable mortar mixer

until a homogeneous slurry is obtained.

- The slurry is then poured onto the surface of the concrete at a minimum rate of 12 kg/m<sup>2</sup> and levelled to the required thickness using straight edges.
- The **Qualiroc** should then be floated using hand trowels for edges and corners and power floats for the main surface.
- A smooth, hard finish is then obtained by use of a power float equipped with finishing blades.

### Application of Roc cure

- The curing agent **Roc Cure** should be applied immediately after the finishing operation is complete. It is applied using a low pressure spray apparatus evenly over the entire surface at a rate of 100 g/m<sup>2</sup>.
- It is essential that the curing process be well advanced before the floor is put into service. The following delays must be observed:

pedestrian traffic	7 days
light traffic	14 days
full use (fork lifts etc)	28 days

## Coverage

The floor hardener shall be **Qualiroc** applied at a rate of:

- 4 to 7 kg/m<sup>2</sup> dry shaking
- 8 to 12 kg/m<sup>2</sup> mechanical spreader
- 12 kg/m<sup>2</sup> 'fresh on fresh' topping

The curing agent shall be **Roc Cure** applied at a rate of 100 g/m<sup>2</sup>. See **Roc Cure** data sheet.

## Packaging

**Qualiroc** is packed in 25 kg bags. When stored under cover in dry conditions the shelf life is 6 months. Once opened the contents of a bag must be used immediately.

A guide to the maintenance of **Roc** floors is available on request.

## Health and safety

As with all powder products the wearing of a dust mask and gloves is advised.

(See our Material Safety Data Sheet for full details).

### Note :

The screed properties under site conditions cannot always be directly comparable with the screed material properties obtained under laboratory conditions, due for instance to variations of mixing, compaction or curing.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.rocland.eu](http://www.rocland.eu)  
[contact@rocland.eu](mailto:contact@rocland.eu)

# Fibres





# ROCLAND

## Proroc NT

### Synthetic fibre additive for concrete industrial flooring

#### Product description

*Proroc NT* is a process that consist in the reinforcement of concrete slabs through the combination of two factors :

- multifilament PP fibres
- plasticiser

*Proroc NT* reduce plastic shrinkage and settlement cracking.

*Proroc NT* is made of a high strength multifilament that disperses easily and uniformly throughout the mix.

- Secondary reinforcement to inhibit cracking
- Enhanced pumpability
- Improve abrasion and shock resistance
- Reduce permeability
- Minimized bleeding
- Excellent resistance to almost chemical
- Rust proof

*Proroc NT* is versatile in its range of applications, but should never replace structural steel. It can easily and effectively be used in numerous concrete applications including:

- Concrete Floors
- Imprinted concrete
- Pavements
- Screeds
- Shotcrete
- Grouts
- Mortar

#### Packaging

- *Proroc NT* :
  - Water-soluble bags
  - 600 g. bag
  - 40 bags per box
  - 15 boxes (360 Kg) per pallet.
- *PO fluid* plasticiser:
  - 500 g bag.

Fibres must be stored under cover in dry conditions.

#### Method statement

*Proroc NT* is easy to use. It can be added to the concrete at the ready mix plant, or at the job site.

*Proroc NT* should be added at the rate of one bag (0.6kg) per m<sup>3</sup> of concrete. Mixing time required for proper dispersion of *Proroc NT* is usually 5 minutes. However, this can be affected by mixer performance or the rate at which the fibres are added.

*Proroc NT* should be added one bag at a time. Slower addition of the fibres reduces the mixing time.

NO ADDITIONAL WATER is required. For greater workability use a *PO fluid* plasticiser (1 bag per m<sup>3</sup>).

#### Aspect

Fibres are thin enough (18 microns diameter) to be practically invisible onto the concrete surface.

Slabs can be left with or without specific coatings (finished surface can be rough, with floor hardeners or any other coverings).

All Roeland floor hardeners are compatibles with *Proroc NT* process, whether incorporation method is manual, mechanic or through a topping.

#### Health and safety

Non dangerous good.

Read safety data sheet for more details.

#### Note:

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.rocland.eu](http://www.rocland.eu)  
[contact@rocland.eu](mailto:contact@rocland.eu)



# ROCLAND

## IVX 50

### Low cost steel fibres

#### Product description

The **IVX** steel fibres are crimped with a semi-circular section. It is a very competitive fibre which is extremely easy to mix into the concrete.

#### Benefits

**IVX** steel fibres improve the concrete performance in terms of:

- Flexural strength
- Impact resistance
- Shrinkage

#### Uses

**IVX** steel fibres are used for industrial concrete floors with induced saw cut joints.

#### Physical properties

**Length:** 50 mm

**Tensile strength (ISO-89-1974):** 850 MPa

**Anchorage:** crimped shape

#### Design

Concrete reinforced with **IVX** steel fibres must be designed by a qualified engineer.

#### Method statement

**IVX** steel fibres are mixed at the concrete plant or on site directly into the concrete lorry after the addition of a superplasticiser.

#### Dosage

The dosage of **IVX** steel fibres varies between 20 to 40 kg/m<sup>3</sup> to suit design requirements.

#### Packaging

**IVX** are packed in boxes of 25 kg. For larger quantities, boxes are grouped on pallets of 1,000 kg.

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

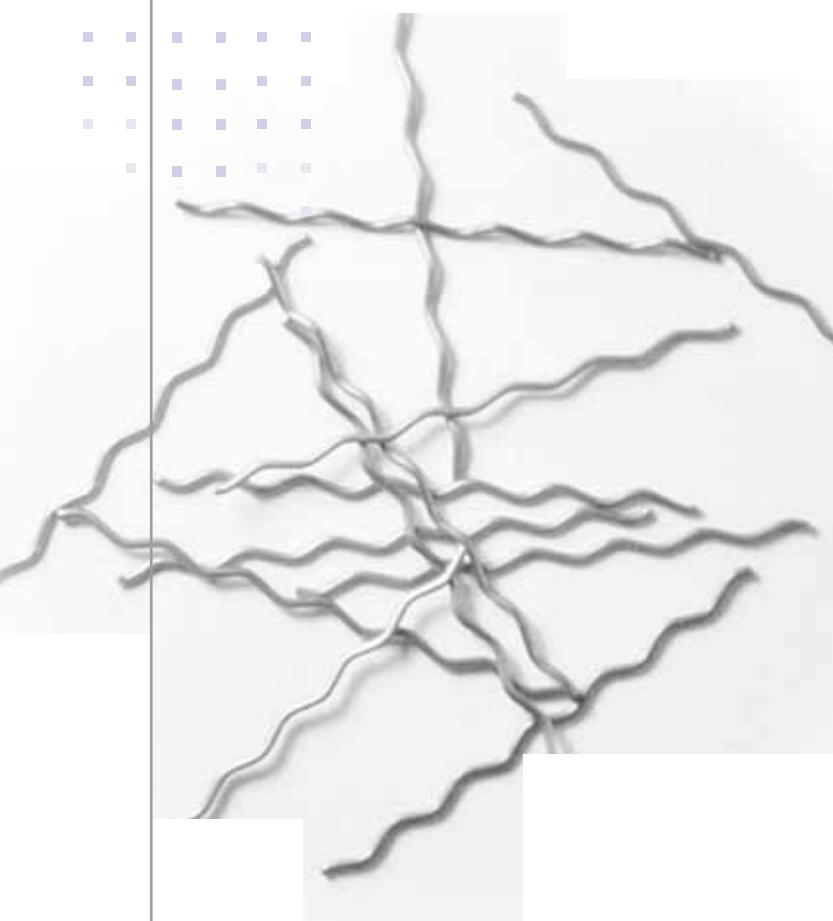
[www.rocland.eu](http://www.rocland.eu)  
[contact@rocland.eu](mailto:contact@rocland.eu)



# ROCLAND

## Eurosteel® 50-100

### High ductility steel fibres for structural concrete



#### Product description

**Eurosteel®** is a cold drawn steel fibre with a continuous crimped deformation which has been designed to significantly improve the performance of the concrete.

#### Benefits

**Eurosteel®** fibres significantly improve the concrete performance in terms of :

- Toughness
- Flexural strength
- Shear strength
- Impact resistance
- Shrinkage

#### Uses

- **Silifiber®** ground bearing slabs (internal or external)
- Conductil® 'joint-free' slabs on ground
- Spanfibre composite floors on steel decks

#### Physical properties

Length:	50 mm
Diameter:	1 mm
Tensile strength (ISO-89-1974):	1100 MPa
Anchorage:	6 waves
Wave depth:	1 mm
Carbon content (DIN 1652):	< 0.15 %

#### Manufacturing

The production of **Eurosteel®** is controlled to the highest quality standards EN ISO 9001:2000 and TÜV.

#### Agreements

The use of **Eurosteel®** fibres is the subject of an agreement by technical surveyors in different countries: Seco in Belgium, Socotec & Qualiconsult in France.

#### Design

Concrete reinforced with **Eurosteel®** fibres must be designed by a qualified engineer.

#### Method statement

**Eurosteel®** fibres are mixed on site. A 'blast-machine' blows the fibres directly into the concrete lorry in order to ensure an even distribution and fast mixing. The **Eurosteel®** fibres must be handled by a qualified operator.

#### Dosage

The dosage of **Eurosteel®** fibres varies between 20 and 60 kg/m<sup>3</sup> to suit design requirements.

#### Packaging

**Eurosteel®** fibres are packed in boxes of 25 kg. For larger quantities, boxes are grouped on pallets of 1,500 kg.

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.roclang.eu](http://www.roclang.eu)  
[contact@roclang.eu](mailto:contact@roclang.eu)

# Additives



# ROCLAND

## Roc Accelerator NC

### Non-chloride accelerating admixture

#### Product description

**Roc accelerator NC** is a ready-to-use liquid admixture formulated to accelerate the setting time of concrete and mortar under winter conditions. It also produces high early strength.

**Roc accelerator NC** is recommended for all types of concrete : slab on grade, slab on deck, spray mortar, cementitious screeds. It does not contain added chloride which means there is no risk of corrosion of reinforcing steel or steel fibres.

#### Physical properties

	Brown colour
Density :	1,4 ± 0,1
pH :	4,75 ± 1
Dry extract :	50 ± 2 %

#### Quantity to use

**Roc accelerator NC** is used over a range of 1 to 2 % of the cement content: 0.7 to 1.4 litres per 100 kg of OPC.

The dosage rate is dependent on the ambient concrete temperatures and must be adapted on each case.

It must be added in the truck mixer; mixing time is around 1 minute per cubic meter.

#### Packaging

- 28 kg can
- 280 kg drum
- 1400 kg container

#### Health and security

NON DANGEROUS ADMIXTURE.

MSDS available on request.

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.roclang.eu](http://www.roclang.eu)  
[contact@roclang.eu](mailto:contact@roclang.eu)



# ROCLAND

## Roc MA Fluid Superplasticiser

### Product description

**Roc MA fluid is a new generation of superplasticiser which provides excellent early strength, suitable for both the precast and readymix markets.**

**The main properties of Roc MA fluid are :**

- High water reduction
- Low water/cement ratio
- Excellent surface finish
- Increased strength development
- Does not contain chlorure or other steel corrosion components
- Suitable for fast track production
- Increased durability.

### Physical properties

<b>Colour:</b>	brown
<b>Form:</b>	liquide
<b>Specific gravity:</b>	1.13 ± 0.03
<b>Dispersion PH:</b>	8 ± 1
<b>Equivalent sodium:</b>	max 4 % Na <sub>2</sub> O
<b>Chlorure content:</b>	Nil (i.e < 0.1 % w/c)

### Method statement

**Roc MA fluid** is added with the initial mixing water to achieve substantial water reduction and excellent dispersion.

**Roc MA fluid** should be added after the gauging water to ensure maximum workability.

### Dosage

0.5 - 1.5% BWC.

### Storage

**Roc MA fluid** should be stored in dry conditions above 0°C in original sealed containers.

The shelf life of **Roc MA fluid** under these conditions is a minimum of 12 months.

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.roclang.eu](http://www.roclang.eu)  
[contact@roclang.eu](mailto:contact@roclang.eu)

# Cure & Seal





# ROCLAND

## Roc Cure Solvent based concrete curing

### Product description

**Roc cure** is a solvent based resin specially designed for the curing of concrete industrial floors.

**Roc cure** is translucent and must be applied using a sprayer.

The formulation of **Roc cure** enables a homogenous hydration process during 28 days in order that the top surface gains as much strength as possible.

### Benefits

- Improves concrete hydration process
- Improves surface appearance
- Prevent dusting
- Reduces early-age cracking.

### Uses

- Plain concrete
- Curing of Roclang dry shake hardeners.

### Physical properties

<b>Colour:</b>	clear
<b>Density:</b> EN-ISO 2811	0.82 +/- 0.04 g/ml
<b>Flash point:</b>	> 33 °C
<b>Freezing point:</b>	not applicable
<b>Depth of impregnation:</b>	Class II according to EN 1504-2
<b>Index of speed drying:</b>	class II according to EN 13579
<b>RT ITB:</b>	-1178/2010
<b>Coverage:</b>	5 to 8 m <sup>2</sup> /litre



# Roc Cure

## Method statement

### Application of concrete/hydraulic binder

Concrete slab, topping and/or hydraulic binders must be laid prior to the application of **Roc cure**. Avoid excess of water before application of curing agent.

### Roc cure application

- The curing agent **Roc cure** should be applied immediately after the finishing operation is completed. It is applied using a low pressure spray apparatus evenly over the entire surface at a rate of 100 g/m<sup>2</sup> to 150 g/m<sup>2</sup>.
- It is essential that the curing process be well advanced before the floor is put into service. The following delays must be observed:
  - pedestrian traffic 7 days
  - light traffic 14 days
  - full use (fork lifts etc) 28 days.

A guide to the maintenance of **Roc** floors is available on request.

## Packaging

**Roc cure** is supplied in 20, 200 or 1000 litres containers. When stored under cover in dry conditions the shelf life is 12 months.

## Dosage

**Roc cure** must be applied at a rate of 100 g/m<sup>2</sup> to 150 g/m<sup>2</sup>. **Roc cure** shall be applied as evenly as possible onto the surface by use of a spray equipment.

**Roc cure** must not be diluted.

## Health and safety

As with all solvent based products the wearing of gloves, mask and glasses is advised. Avoid inhalation and contact with eyes, skin, mouth. Use only in ventilated areas where smoking is prohibited. Splashes to eyes or skin must be treated immediately with water.

Safety data sheet available on request.

### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.rocland.eu](http://www.rocland.eu)  
[contact@rocland.eu](mailto:contact@rocland.eu)

# Ecocure 17

## Water-based curing compound for industrial concrete floors

### Product description

**Ecocure 17 is a high-quality curing compound that allows complete hydration of the concrete. Ecocure 17 creates a protective film that reduces excessively rapid evaporation of the mixing water.**

### Benefits

- Effective protection for curing of the supporting layer for at least 7 days.
- Penetrates the pores of the concrete and reduces crazing.
- Compatible with many primers and bonding glues.
- Curing compound capable of accepting immediately an appropriate surface treatment.

### Uses

**Ecocure 17 gives effective protection for:**

- slabs and pavements on finished concrete surfaces (Unified Technical Document DTU 13.3).
- cement screeds.
- finishing coats based on hydraulic binders.
- floors of self-compacting concrete.

**Ecocure 17** is suitable for indoor and outdoor application.

### Physical properties

**Appearance:** milky-white non-toxic liquid that becomes transparent on drying

**Density:** 1+/- 0.05 g/ml

**pH:** 8/9

**Non-flammable**

**Depth of impregnation:** Class II according to EN 1504-2

**Index of speed drying:** class II according to EN 13579

**RT ITB:** -1177/2010

**Coverage:** 80 to 100 g/m<sup>2</sup> (10 to 12 m<sup>2</sup>/litre) depending on the finish

**Does not require surface treatment such as scraping or pickling. Contact us regarding use other than as described here.**

### Directions for use

- Spray with thermal sprayer.
- Spray onto supporting layer with no trace of moisture or surface water.
- Sustains use after 8 hours at 20 °C (surface-dry after 1 hour at 20 °C).
- Excessively thick application may result in colour changes, especially in cold weather.
- Do not use in freezing conditions.

### Packaging

- 20 litre can.
- 200 litre drum.
- 1 000 litre container.

### Storage

- Non-flammable product.
- Storage life: one year in the original packaging.
- Protect from freezing.

### Health and safety

- Safety data sheets on request.

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



# ROCLAND

## Roc Seal

### Waterproof and oilproof sealer for concrete slab

#### Product description

**Roc seal** is a milky white liquid of synthetic resin and reactive fluosilicates compounds.

**Roc seal** creates insoluble salts and resin film which reinforce the concrete, reducing the porosity.

**Roc seal** is used to improve the hardening of concrete. This is particularly efficient for new or old concrete developing dust.

Cleaning maintenance is greatly facilitated, reducing the penetration of oil, grease, diluted acids and bases.

#### Physical properties

<b>Aspect:</b>	milky white liquid
<b>Density:</b>	1.0 ± 0.1
<b>pH:</b>	11 ± 0.1
<b>Non-flammable:</b>	
<b>Application temperature:</b>	5 to 30 °C

#### Packaging

20 litres drum.

The product can be stored one year in its original container, kept in a closed place and protect from frost.

#### Method statement

**Roc seal** is ready to use.

Surfaces must be clean, dry and free of all loose dirt, oil, wax, sealers and curing products.

New concrete must be thoroughly set and dry, 7 days minimum.

Application can be sprayed or flushed, distributed evenly with a brush or rubber squeegee.

Very porous surface will need a second layer after 12 hours at + 20 °C.

#### Nota :

- The surface can be walked on after 12 hours at 20 °C.
- Optimal characteristics are obtained after 8 days.
- Do not use when the temperature is under + 5 °C.

#### Precautions:

**Roc Seal** can slightly affect the colour of the support : a test will be necessary particularly for chalky stones and coloured concrete slabs.

#### Coverage

Depending on the porosity.

Approximately 0.2 to 0.3 litre per m<sup>2</sup>.

#### Health and safety

Non dangerous

Refer to our safety data sheet.

#### Note:

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.roclang.eu](http://www.roclang.eu)  
[contact@roclang.eu](mailto:contact@roclang.eu)



# PLACEO SEAL

## Liquid hardener and curing compound

### Product description

**PLACEO SEAL reacts with the “free lime” in newly placed, interior or exterior concrete to provide a hard surface. PLACEO SEAL cures and provides a permanent seal.**

### Physical properties

Potassium salt of salicylic acid

**Density :** 1.0 +/- 0.05

**pH :** 9/10

**Dry extract :** 17 % by weight

**Coverage :** 5 to 10 sqm/liter

0.1 to 0.5 liter/sqm

**Non-flammable**

### Uses

Concrete floor slabs, side walks, drive-ways.  
Concrete surfaces treated with **PLACEO SEAL** can accept subsequent coatings.

### Application datas

#### CURING :

**PLACEO SEAL** should be applied to newly placed concrete as soon as the surface water has dissipated and the concrete has been finished.

#### DUSTPROOFING :

**PLACEO SEAL** can also be applied as a hardener approximately 28 days after concrete placement (clean thoroughly using special floor products and rinse).

Apply **PLACEO SEAL** to colored concrete only after 28 days.

#### TREATMENT RESULTS

Concrete sealed for its lifetime.  
Efflorescence, alkali and limes leaching are stopped.

#### Note :

Whilst all reasonable care is taken in compiling technical data on company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.

#### APPLICATION :

Ready to use, do not dilute  
Mix the product before use  
Spray application with industrial pump-up sprayers is recommended.

Apply material uniformly, avoiding over-application.  
Application temperature : +5° C to + 30° C

#### DRYING TIME :

Depending of the weather conditions and use. Generally dry in two hours.  
Allow a minimum of 24 hours before opening area to traffic.

### Packaging

20 litres jerrican  
200 litres drum  
1 000 litres container

### Shelf life

Shelf life of **PLACEO SEAL** in unopened containers is approximately one year. **Protect from freezing.**

### Health hazards

Refer to our safety data sheet on request.

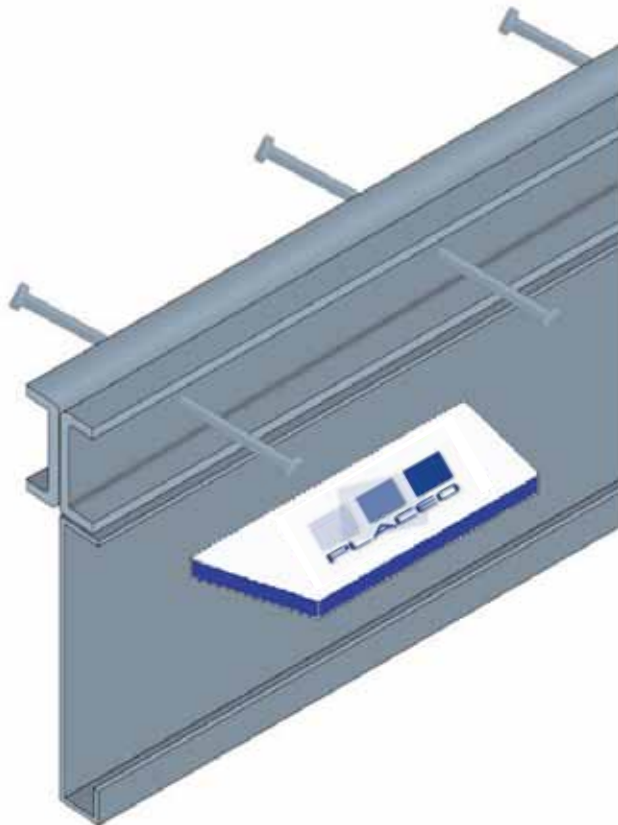


# Armoured joints



# Gamma Joint

## Construction joints for industrial flooring



### Description

The Gamma joint is a metallic profile formed by 2 parts assembled by a nylon nut-screw system, which give away under the constraint action of the concrete shrinkage and allows the opening of the joint. On the upper part, the Gamma joint has on both sides of the joint 2 steel plates of 15 mm. These both plates give an optimal protection of the edges of the concrete slab. The transfer of load is realized by the Gamma dowel plates set out along the joint all 630 mm centers.

The Gamma joint allows:

- The statics and dynamics vertical loads transfer
- The shrinkage
- The protection of the edges of the concrete slab

For an optimal use of the system, the maximal opening can't exceed 20 mm. Metallic construction joint for concrete slab on piles and ground bearing field. The Gamma joint protect the edges and ensure the effort transmission between 2 adjacent concrete slabs.

### Height of the joint For a thickness slab of

120 mm	130-155
140 mm	150-180
160 mm	170-200
180 mm	190-220
200 mm	210-240
220 mm	230-260
250 mm	260-290
275 mm	285-315

Z.A. Les Monts du Matin  
Rue des Lauriers  
26730 La Baume d'Hostun  
France

Tél. : + 33 (0)4 75 48 37 50

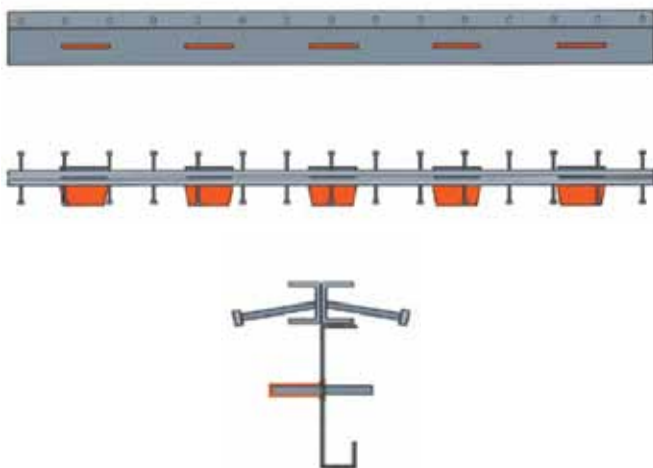
Fax : + 33 (0)4 75 48 30 03

[www.placeo.eu](http://www.placeo.eu)

#### Advice note :

Based on our tests in laboratory, on detailed technical studies and on our job sites experiences, the indications and recommendations hold in this data sheet do not however possess an autocratic nature. The use of this product by the applicator shall have to be preceded by tests in order to verify our recommendations and to ensure that our product is suitable for the foreseen use. Any error of appreciation wouldn't entail (run) our liability.

# Gamma Joint



## Technical specifications

For concrete slab on ground bearing until 300 mm thickness.

Standard length: 3000mm (3m) Tolerated opening of the joint: 20 mm max.

Load transfer ensured by 5 Gamma dowels plates of 8 mm thickness situated 630 mm centers.

Anchorage ensured by 15 connectors (diameter 10 mm and length 100 mm, at 200 mm centers)

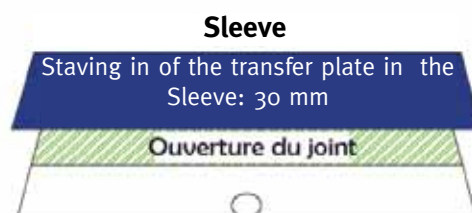
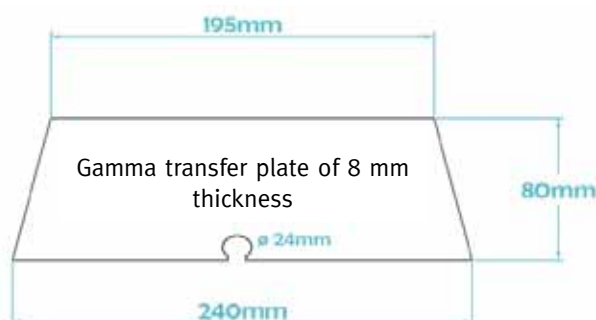
Comparison between load transfer capacities of a trapezoidal Gamma plate and a cylindrical dowel of 20 mm diameter for a joint opening of 20 mm.

TYPE DE GOUJON	diamètre (ouverture en mm) (pour 8 mm)	ouverture du joint (mm)	CHARGE ULTIME par GOUJON en kN					CHARGE ULTIME par METRE (kN/m)	
			Collèment	Flexion	Combiné	Torsion	Rupture		
1	Coujon cylindrique diamètre 20	300	20	36.9	29.0	22.7	42.7	16.8	56.0
	Plaque de transfert Gamma épaisseur 8 mm	600	20	196.3	72.7	74.3	67.3	38.3	
2	Coujon cylindrique diamètre 20	300	20	36.9	29.0	22.7	42.7	29.0	75.7
	Plaque de transfert Gamma épaisseur 8 mm	600	20	196.3	72.7	74.3	67.3	66.5	

1 - Plain concrete

2 - Reinforced concrete of 40 kg/m<sup>3</sup> of steel fibres

The above calculations are based on a characteristic resistance in the concrete compression of 40 MPa, an elastic limit of the steel of 250 MPa, a safety factor of 1,5 for the concrete, and a safety factor of 1,15 for the steel. If the elastic limit of the steel was 460 MPa, the capacity in flexion, shearing and torsion could be improved by a factor 1,85.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Tél. : + 33 (0)4 75 48 37 50  
Fax : + 33 (0)4 75 48 30 03  
www.placeo.eu

### Advice note :

Based on our tests in laboratory, on detailed technical studies and on our job sites experiences, the indications and recommendations hold in this data sheet do not however possess an autocratic nature. The use of this product by the applicator shall have to be preceded by tests in order to verify our recommendations and to ensure that our product is suitable for the foreseen use. Any error of appreciation wouldn't entail (run) our liability.



# Delta HP joint

## Metallic contraction & day-joint for industrial concrete floors

### Product description

Metallic contraction and day-joint designed for industrial concrete floors on ground or suspended on piles. The *DELTA HP* joint gives arris protection as well as the load transfer between concrete slabs.

### Features & benefits

The metallic *DELTA HP* joint is made of 2 steel profiles that can be embedded thanks to a continuous dowel plate of 10 mm thickness.

- Vertical load transfer for static loads
- Vertical load transfer for traffic and dynamic loads
- Free horizontal movement
- Opening up to 20 mm
- Concrete arris protection
- Resistance to fatigue and impact

### Applications

- Ground bearing concrete floors
- Concrete floors for car park, office or house
- Suspended slabs on piles
- General raft foundations

### Technical specifications

Flange thickness	5 mm
Height	from 110 to 300 mm
Continuous dowel plate	10 mm
Anchorage	connectors
Steel grade (EN10025)	S235JRG2

### Use

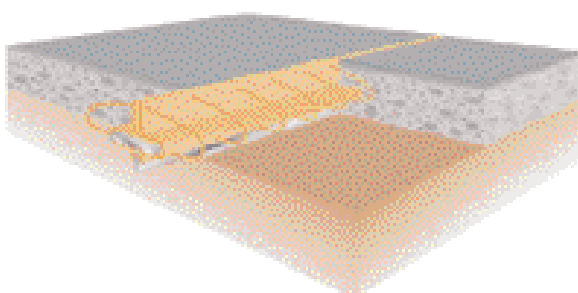
The metallic *DELTA HP* joint must be placed in accordance with the PLACEO method of placement (available on request).

### Accessories

Supports, additional anchorages, stainless steel lips, and connections.

### Patent

The metallic *DELTA HP* joints are patented in Europe (n° 99 870 073.6)



# Joints sealing





# ROCLAND

## Roc Joint PU 920/925

### Single based polyurethane joint sealer

#### Product description

**Roc joint PU 920/925** is a polyurethane sealer in cartridge (ref 920) or sausages (ref 925) to fill inside or outside saw cut concrete floor joints.

**Roc joint PU 920/925** cures under the effect of atmospheric humidity to form a flexible joint with very good resistance to hydrocarbon and most of chemical products.

#### Physical properties

Aspect:	light grey pasty
Density:	1.16 +/- 0,05
kin formation time:	60 mn at 20 °C
Cure time:	3 mm/24 h at 20 °C
Application temperature:	5 to 35 °C
Shore A hardness:	40 to 50
Temperature resistance:	- 30 to + 60 °C
Elongation at break:	> 300 %

#### Packaging and Storage

**Roc joint PU 920** : 310 ml cartridge.

**Roc joint PU 925** : 600 ml sausage.

Storage : 12 months in the original, hermetically sealed packaging between 5 and 25 °C.

#### Instruction for use

The substrate must be clean, free of dust, oil, grease and any contaminant that could harm bonding.

Place a backfilling foam so that the depth equals 1,5 the width.

**Roc joint PU 920/925** can be applied by a manual or pneumatic gun. After the application, use a putty knife to smooth the joint.

Cleaning: Tools should be cleaned with acetone, MEC or white spirit.

#### Consumption

One cartridge **PU 920** (310 ml) for a 4 mm width ,7 mm depth, , 10 meters length.

20 sausages **PU 925** (600 ml) for 6 mm width, 9 mm depth , 100 meters length.

#### Health and safety

Not classified as hazardous.

Read the material safety data sheet before use.

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.roclang.eu](http://www.roclang.eu)  
[contact@roclang.eu](mailto:contact@roclang.eu)

# Bonding agent

# CEMCOL

## Bonding agent

### Product description

Ready to use mix cementitious compound modified with resin and additives to guarantee a very strong bond over concrete.

**CEMCOL** allows a very great strong bond, specially suitable for PLACEO hard aggregates screeds over concrete and new concrete over existing concrete.

Ready to use product to be mixed with water (5.5 to 6 liters of water for a 20 kg bag).

Contact us for any specific project.

### Physical properties

Appearance : grey fine powder

Density : 1,6

Grading : 0/0.5 mm

Bonding strength on concrete : > 2.2 MPa

In accordance with EN 13813

### Packaging

**CEMCOL** : 20 kg bags

### Storage

Dry like cement.  
Self life about 6 months

### Processing

The surface strength has to be minimum 1.5 MPa.

#### • Surface preparation

The base concrete must be very clean, pre-treated by milling or high pressure water..., and water soak the day before the beginning of work

#### • Processing **CEMCOL**

Mix **CEMCOL** with clear water (5,5 to 6 liters of water by 20 kg bag) and stir about 3 mn.

Mix the product following the site work advance, don't try to remix **CEMCOL** with water. Apply **CEMCOL** with a hard brush on the base still wet at the rate of 2 kg/sqm minimum. **CEMCOL** shall be preferably applied using a pump.

Screed, slurry, mortars, concrete will be applied on **CEMCOL** still wet and sticky.

If it's not the case, do the work again after having re-humidified the support.

Don't use the product by frozen weather

Application temperature: min 5°C, Max 35°C

Clean the material with water

### Health and Safety

**CEMCOL** contains cement

Eyes and hands must be protected against irritation

- MSDS on request

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



# ROCLAND

## Roc Latex

### Bonding agent for concrete and mortar

#### Product description

Roc *latex* is an aqueous dispersion of synthetic resin specially formulated to increase the resistance of mortar as well as to formulate cementitious bonding agents Roc *latex* is recommended for :

- Bonding agent for screed,
- Bonding agent for toppings
- Repairing mortars
- Masonry joints

#### Physical properties

Appearance:	milky white liquid
Dry extract:	38 %
Ph:	7 /9
Density:	1 +/-0,1
Type de polymère :	styrène, butadiène
MFT:	5 °C

Bonding strength according to EN P 18-872  
test report BMAI 6 4094

#### Packaging

Jerrycan : 24 kg

Container : 1000 kg

The product can be stored during one year in its original package, protected from frost

#### Processing

##### Surface preparation

The base concrete must be very clean, pre-treated by milling or high pressure water...

##### Bonding agent

Prepare a solution composed of one volume of **Roc latex** and two volumes of water, then mix with one volume of cement and one volume of sand 0/2 mm. Screed, slurry, mortars, concrete must be applied when the bonding agent **Roc latex** is still sticky.

##### Quantity

The mixed bonding agent must be applied at the rate of 0,15 to 0,3 Kg/sqm of **Roc latex**.

#### Health and Safety

Non flammable, non dangerous, no regulation.  
MSDS on request

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.roclang.eu](http://www.roclang.eu)  
[contact@roclang.eu](mailto:contact@roclang.eu)



# ROCLAND

## Roc Prim Bonding agent

### Product description

**Roc prim** is a ready-to-use two-component epoxy resin base coating. After mixing with the associated hardening agent, **Roc prim** is used as an adhesion promoter for concrete overlaying, as a binder for mortars for applications with surface humidity until 5%. If applied between two concrete layers it works as a moisture vapour barrier.

### Physical properties

Density (20°C) :	1 +/- 0,1
Viscosity (20°C) :	800 to 1000 mPa.s
Dry extract :	100 %
Solvent free	
Processing time 20°C :	40 min
Adhesion on concrete :	> 1,5 MPa

### Processing Instructions

#### Substrate Preparation

The substrate must be prepared by vacuum shot blasting. Rough contaminations can be removed by grinding.

**Roc prim** can be applied to the surface directly if the substrate moisture content does not exceed max. 5.0 % by weight (measured electrically using the Krafft method or according to a recognised standard). The surface must have an adhesive strength of minimum 1.5 N/mm<sup>2</sup>. All traces of contaminants such as oils, fats, greases, paint residues, chemicals, algae and laitance should be removed. Cracks and hollow spots must be properly remedied.

#### Processing

The product is delivered in 2 component containers in the exact mixing ratio. Before starting the application, the material has to be heated to ambient temperature (air and floor temperature). The entire contents of the B-component container is emptied into the A-component container. After mixing with a suitable electrical stirrer for approx. 3-4 minutes the mixture is poured into another container and stirred again briefly. The inclusion of air in the stirring process is to be avoided.

#### Reworking

Wet concrete application has to take place within 2 hours after application of the layer.

### Packaging

- 5 kg and 25 kg (A+B).

The product can be stored during 6 months.

### Consumption

1 kg to 2 kg/m<sup>2</sup> depending of the support aspect.

### Health and safety

Users are advised to wear gloves and eye protection when mixing or applying **Roc prim**.

MSDS on request.

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.roclang.eu](http://www.roclang.eu)  
[contact@roclang.eu](mailto:contact@roclang.eu)

# Floor Care





# ROCLAND

## Decap Roc Stripper-Grease remover

### Product description

**Decap Roc is a solvent based of different surface active agents. Clear liquid.**

**Decap Roc is formulated to remove Roc Cure and generally all petroleum resin based treatment products on concrete and industrial floors.**

### Physical properties

Aspect:	clear yellow liquid
Density:	1 +/- 0,1
Non-flammable	
pH:	13 +/- 0,1
Biodegradability:	> 90%

### Packaging

20 litres drum.

The product can be stored one year in its original container, kept in a closed place and protect from frost.

### Instruction for use

- Dilute one volume of **decap Roc** in two volumes of water. Apply the product using a floor scrubber or airless spray.
- Allow to act 5 to 10 minutes then brush immediately with self washing machine using a red disc and simultaneous suction.
- Rinse the surface with **Roc neutre**

**Important:** After removing, the surface is mat. to obtain brilliance, refer to Roc Finish

### Coverage

Approximately 20 litres for 200 m<sup>2</sup>.

### Health and safety

Refer to our safety data sheet.

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.roclang.eu](http://www.roclang.eu)  
[contact@roclang.eu](mailto:contact@roclang.eu)



# ROCLAND

## Roc Neutre Cleaning agent

### Product description

**Roc neutre** is a neutral detergent, pleasantly perfumed and rich in tension-active and sequestrant agents.

**Roc neutre** is non foaming and has been developed for simple everyday use with a buffer or cleaning machine on treated floors.

**Roc neutre** is above all recommended for rinsing stripped surfaces.

### Physical properties

<b>Aspect:</b>	transparent green liquid
<b>Density:</b>	1.0 ± 0.1
<b>Non-flammable</b>	
<b>pH:</b>	7 ± 0.1
<b>Biodegradability:</b>	> 90%

### Packaging

- 20 litres can
- 200 litres drum.

The product can be stored one year in its original container, kept in a closed place and protect from frost.

### Method statement

- Prepare a 1% solution of **Roc neutre** (one part of **Roc neutre** for 100 parts of water) in the reservoir of a buffer or floor-scrubber fitted with white or red discs.
- Turn off vacuum.
- Wash liberally with this solution several times (minimum twice).
- On the last wash with the buffer or floor scrubber, vacuum the suspension leaving a perfectly clean surface.

### Dosage

Approximately 1 liter for 50 m<sup>2</sup>.

### Health and safety

Non dangerous good.

Refer to our safety data sheet.

#### Note:

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.roclang.eu](http://www.roclang.eu)  
[contact@roclang.eu](mailto:contact@roclang.eu)



# ROCLAND

## Roc Polish Floor care

### Product description

**Roc polish** is a polymer, wax and surface-active agent based emulsion which gives deep cleaning whilst depositing a high-gloss protective film.

**Roc polish** helps in the maintenance of industrial floors.

**Roc polish** is recommended for all concrete floors and specially for floors treated with **Roc finish** or **Roc seal**.

### Physical properties

Aspect:	white milky liquid
Density:	1.0 ± 0.1
Non-flammable	
pH:	7 - 8
Application temperature:	5 to 30 °C

### Packaging

20 litres drum.

The product can be stored one year in its original container, kept in a closed place and protect from frost.

### Method statement

With weekly or monthly upkeep depending on conditions, after cleaning the surface with **Roc neutre**, apply **Roc polish** diluted with water (for example 1 part of **Roc polish** for 9 parts of water) using a buffer or applicator sleeve.

The gloss and degree of protection are directly linked to the concentration of product.

However, to bring out the polish, on dry surface, pass over a machine fitted with a cream or white disc at high speed.

### Coverage

Between 1 litre per 20 m<sup>2</sup> for neat application and 1 litre per 200 m<sup>2</sup> in a 10 % concentration.

Application depends on the gloss finish and protection desired.

### Health and safety

Non dangerous good.

Refer to our safety data sheet.

#### Note :

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.rocland.eu](http://www.rocland.eu)  
[contact@rocland.eu](mailto:contact@rocland.eu)



# ROCLAND

## Roc Finish Floor care

### Product description

**Roc finish** is a very hard mono-component water-based emulsion designed to protect floors and to help in their upkeep.

**Roc finish** is formulated for use on concrete and paving.

### Physical properties

Aspect:	Milky white liquid
Density:	1.1 ± 0.1
Non-flammable	
pH :	8.0 ± 0.1
Application temperature:	5 to 30 °C

### Packaging

20 litres drum.

The product can be stored one year in its original container, kept in a closed place and protect from frost.

### Method statement

- On surfaces consisting of **Roc cure**, strip this using **Roc decap**.
- On surfaces free of any treatment ( curing products, wax or similar) , neutralised using **Roc neutre**, apply one coat of **Roc finish** using an application sleeve or airless spray; Wait for this coat to dry completely before applying a second layer for a satin finish.

Can be walk on after 24 hours at 20 °C

Fully useable after 36 hours at 20 °C

**Roc neutre** with daily upkeep, and **Roc polish** with weekly or monthly depending on conditions are particularly adapted to make the treatment with **Roc finish** more durable.

### Coverage

Approximately 1 litre for 10 m<sup>2</sup> (minimum two layers).

### Health and safety

Non dangerous good.

Refer to our safety data sheet.

#### Note:

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.



Z.A. Les Monts du Matin  
Rue des Lauriers  
F-26730 La Baume d'Hostun  
France  
Office phone : + 33 4 75 48 37 50

[www.roclang.eu](http://www.roclang.eu)  
[contact@roclang.eu](mailto:contact@roclang.eu)



## Systèmes Rocland - Solutions with Rocland



ROCLAND

*Resistant everywhere*

Z.A. Les Monts du Matin Rue des Lauriers F-26730 La Baume d'Hostun France  
Tél. : + 33 (0)4 75 48 37 50 Fax : + 33 (0)4 75 48 30 03  
[www.placeo.eu](http://www.placeo.eu) [www.rocland.eu](http://www.rocland.eu)

Rocland is a worldwide registered trade mark of placeo