



# New Guard Coatings Group

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[www.newguardcoatings.com](http://www.newguardcoatings.com)

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**RUST-OLEUM®**  
INDUSTRIAL



## 9100 HIGH PERFORMANCE EPOXY

# High build chemical resistant & anti-corrosion epoxy

- 2x thicker than regular epoxies (125 micron dry)
- Very resistant against abrasion and chemicals
- Contains a high amount of rust inhibitors
- Can be applied on metal and floors
- Tintable in almost any colour



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# 9100 HIGH PERFORMANCE EPOXY

## DESCRIPTION

Two-pack, glossy epoxy for metal or floors. Very hard coating with high layer thickness.

## RECOMMENDED USE

9100 Topcoats are designed for application on manually prepared rusted steel surfaces and can also be used on clean, blasted steel, primed steel, concrete and previously coated surfaces.

9100 Topcoats offer appropriate protection against strong chemicals, acids, alkalis and solvents; frequent product spillage and chemical cleaning; high humidity and moisture conditions.

## RECOMMENDED SYSTEM

**Topcoat:** If good U.V. resistance is required Polyurethane Topcoats 9200 or 9600 should be applied (except for the clear coatings).

**Primers:** 9100 Topcoats can be applied on cleaned, sound mineral substrates, sound, well prepared previous coatings; porous substrates should be primed with 5401 or 5421 Impregnation Primer; very dense substrates, like ceramic tiles, should be primed with Super Adhesive 3333 or 3366.

9100 Topcoats can be applied directly on 9170/9180 Metal Primers or 9169 Epoxy Rust Primer.

## TECHNICAL DATA

Density:	1,25 (9101) - 1,4 (9101HS) - 1,37 (9101WG)
Gloss Level:	Gloss
Corrosion Class:	C4 high protection
Solids content in volume:	75 % (9101) - 91 % (9101HS) - 89 % (9101WG)
Heat Resistance:	Immersion or wet heat: 50°C - Dry Heat: 100°C
Compressive Strength:	50 MN/m <sup>2</sup>
Tensile Strength:	10 MN/m <sup>2</sup>
Flexural Strength:	70 MN/m <sup>2</sup>
Mixing Ratio:	Vol: 1 : 1 (9101 & 9101HS) - 2.5 : 2 (9101WG)

## DRYING TIMES AT 20°C/RH 50%

Touch dry:	6 hours (9101 & 9101HS) - 8 hours (9101WG)
Dry to handle:	12 hours (9101 & 9101HS) - 16 hours (9101WG)
Dry to recoat:	After 16 hours within 72 hours
Fully cured:	7 days (9101) - 10 days (9101HS & 9101WG)
Pot Life:	3 hours (9101) - 2,5 hours (9101HS) - 2 hours (9101WG)
Induction Time:	30 minutes (9101) - 15 minutes (9101HS) - 20 minutes (9101WG)

## RECOMMENDED WET FILM THICKNESS

170 µm (9101) - 140 µm (9101HS) - 145 µm (9101WG)

## RECOMMENDED DRY FILM THICKNESS

125 µm

## THEORETICAL CONSUMPTION

6 m<sup>2</sup>/l (9101) - 7.3 m<sup>2</sup>/l (9101HS) - 7 m<sup>2</sup>/l (9101WG)

## PRACTICAL CONSUMPTION

Practical coverage depends on many factors such as porosity and roughness of the substrate and material losses during application.

## SURFACE PREPARATION

Remove grease, oil and all other surface contaminations by alkaline or high pressure (steam)cleaning in combination with appropriate detergents. Sand previous coatings, which are in good condition to remove gloss and to roughen the surface slightly, check compatibility. The surface must be clean and dry during application.

**Steel:** Remove loose rust, mill scale and deteriorated coatings by hand or power tool cleaning to St 2/3 (ISO 8501-01 : 1988). Large areas may be brush-off blasted to Sa 2 (ISO 8501-01 : 1988), blast profile max. 50 µm. For immersion purposes, prepare to Sa 3 (ISO 8501-01 : 1988), blast profile max. 75 µm.

**Concrete and masonry:** New concrete or masonry should cure and dry for at least 30 days before applying the coating system. Remove laitance, any loose or unsound concrete or

deteriorated coatings. Smooth concrete should be roughened.

## DIRECTIONS FOR USE

Base 9100 + Activator 9101: Standard grade

Base 9100 + Activator 9101HS: High Solids grade

Base 9100 + Activator 9101WG: Winter Grade, application at low temperature

Stir individual components thoroughly before mixing them together. Use a mechanical low speed mixer. Mix the product carefully during 3 minutes. Temperature of the mixed materials should be at least 10°C.

## APPLICATION CONDITIONS

Temperature of air and substrate between 10 and 35°C (for the 9100/9101WG between 0 and 15°C) and relative humidity below 85%. The substrate temperature must be at least 3°C above dew point.

## APPLICATION & THINNING: BRUSH

Use natural bristles, long hair brushes. Dilute up to 10% volume with Thinner 160 (do not dilute 9101HS). Preferably use disposable brushes.

## APPLICATION & THINNING: ROLLER

Use a medium nap polyamide 16-20 mm rollers. Roller application requires 2 coats to achieve recommended d.f.t. Dilute up to 10% volume with Thinner 160 (do not dilute 9101HS)

Preferably use disposable rollers.

## APPLICATION & THINNING: AIRLESS SPRAY

Tip size: 0.013-0.021 inch. Fluid pressure: 150 - 225 bar. Avoid excessive film thickness. Up to 10% volume Thinner 160 (do not dilute 9101HS)

## APPLICATION & THINNING: AIR-ATOMISED SPRAY

Not recommended.

## CLEANING OF EQUIPMENT / SPILLS

RUST-OLEUM Thinner 160.

## REMARKS

When the 9100 is in contact with water or chemicals discoloration can occur, especially when colours are made with the ColourShop2 machine.

After about 1 year the colour of the wintergrade activator (9101WG) can become a little darker. This can give an effect in light colours. We therefore advise for bigger projects to use activators from one batch. The batch number is printed on the can.

For use on floors submitted to heavy abrasion, standard and medium colours are recommended. In case of deep and/or bright tones (red, yellow, orange, green, blue etc), it is advised to apply a clear topcoat.

In combination with primer Rust-Oleum 569, the system will not resist mechanical damage.

Maximum dry film thickness per coat: 250 µm dry, equals 335µm wet (Standard) - 275 µm wet (9100/9101HS) - 285 µm wet (9100/9101WG)

## SAFETY DATA

VOC level:	233 g/l (9101) - 99 g/l (9101HS) - 120 g/l (9101WG)
VOC ready mix:	293 g/l (9101) - 99 g/l (9101HS) - 190 g/l (9101WG)
VOC category:	A/j
VOC limit:	500 g/l
Grenelle:	C
Flashpoint:	42 °C
Remarks regarding safety:	Consult Safety Data Sheet and Safety Information printed on the can.

## SHELF LIFE

5 years from date of production in unopened cans, if stored in dry, well ventilated areas, not in direct sunlight at temperatures between 5° and 35°C.

Date issued: 05/09/2018

**Available colours & pack sizes:** Please refer to the respective product page on [www.rust-oleum.eu](http://www.rust-oleum.eu) for an overview of actual available colours and pack sizes.

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