



# 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

KNOW-HOW TO PROTECT™

# 9100 HIGH PERFORMANCE EPOXY

# DESCRIPTION

Two-pack, high layer thickness glossy epoxy, resistant to corrosion and chemicals, suitable for applications on metal or floors. Available wit three activators: 9101 standard, 9101 HS high solids. 9101 WG low temperatures.

# **RECOMMENDED USE**

9100 high Performance can be applied on: manually prepared rusted steel surfaces, new, blasted, primed steel; concrete and previously compatible 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

<u>Topcoat</u>: for U.V. resistance: polyurethane Topcoats 9200 or 9600 should be applied (except for the clear coatings).

<u>Primers</u>: porous mineral substrates: 5401 or 5421 Impregnation Primer. Very dense substrates, like ceramic tiles: Super Adhesive 3333.

9100 Topcoats can be applied on 9169, 9170 and 9180 Metal Primers.

### **TECHNICAL DATA**

Density (g/cm<sup>3</sup>): 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:  $50^{\circ}\text{C}$  - Dry Heat:  $100^{\circ}\text{C}$ 

Compressive Strength: 50 MN/m²
Tensile Strength: 10 MN/m²
Flexural Strength: 70 MN/m²

Mixing Ratio: Vol. 1 : 1 (9101 & 9101HS) - 2.5 : 2 (9101WG)

# DRY TIMES BY 20° C/RV 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: 3h (9101) - 2.5h (9101HS) - 2h (9101WG)

Induction Time: 30 min (9101) - 15 min (9101HS) - 20 min (9101WG)

# RECOMMENDED WET FILM THICKNESS

 $170~\mu m$  (9101) - 140  $\mu m$  (9101HS) - 145  $\mu m$  (9101WG)

# RECOMMENDED DRY FILM THICKNESS

 $125\,\mu m$ 

# THEORETICAL CONSUMPTION

6 m²/l (9101) - 7.3 m²/l (9101HS) - 7 m²/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 all dirt and contaminations by alkaline or high pressure (steam) cleaning in combination with appropriate detergent like Rust-Oleum ND14. Sand previous glossy coatings to roughen the surface slightly, check compatibility. The surface must be clean and dry.

<u>Steel</u>: Remove loose rust, mill scale and deteriorated coatings by hand or power tool cleaning to St 2/3 (ISO 8501-01:1988). Blast large areas to Sa 2 (ISO 8501-01:1988), blast profile max.  $50~\mu m$ . For immersion purposes, prepare to Sa 3 (ISO 8501-01:1988), blast profile

nax. 75 um.

<u>Concrete and masonry</u>: New concrete or masonry should cure for at least 30 days before applying the coating system. Remove laitance, any loose or unsound concrete or coatings. Smooth concrete should be abraded except in case of use of a Rust-Oleum adhesion primer.

# **DIRECTIONS FOR USE**

Stir individual components thoroughly before mixing them together, with a mechanical low speed mixer for 3 minutes.

### APPLICATION CONDITIONS

Temperature of air, substrate and product between 10 and  $35^{\circ}$ C (for the 9100/9101WG between 0 and  $15^{\circ}$ C) and relative humidity below 85%. The substrate temperature must be at least  $3^{\circ}$ C above dew point.

# **APPLICATION & THINNING: BRUSH**

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

# **APPLICATION & THINNING: ROLLER**

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

### 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

A contact with water or chemicals can cause discoloration, especially for colours made with tinting machine. After about 1 year the colour of the wintergrade activator (9101WG) can become a little darker, which can impact light colours. Use bases and activators from one same batch per project. The batch number is printed on the can (R+6 figures). For use on floors subjected to heavy abrasion, standard and medium colours are recommended. In case of deep and/or bright tones (red, yellow, orange, green, blue etc), a clear polyurethane varnish will be applied.

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

# SAFETY DATA

VOC level: 233 g/l (9101) - 99 g/l (9101HS) - 120 g/l (9101WG) VOC readymix: 293 g/l (9101) - 99 g/l (9101HS) - 190 g/l (9101WG)

VOC category: A/j
VOC limit: 500 g/l

Remarks regarding safety: Consult Safety Data Sheet and Safety Information

printed on the can.

# SHELF LIFE

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

**Date issued:** 24/06/2022

Available colours & pack sizes: Please refer to the respective product page on www.rust-oleum.eu for an overview of actual available colours and pack sizes.

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