

EPOXYGUARD IM 409

PRIMER or FINISHING
EPOXY TOLERANT
TWO-COMPONENT
HIGH BUILD

Edition March 15

HIGH BUILD ANTICORROSIVE EPOXY COATING FOR METAL STRUCTURES – TOLERANT TO HUMIDITY

Quickly immersible

Applicable on wet surfaces at low temperature

FEATURES

EPOXYGUARD IM409 is born from the last technological innovations in the chemical sector.

This performance is exceptional for:

- Very high anti-corrosive protection
- Flexible recoating
- High solid (>85%)
- Applicable with AIRLESS in thick layers (600 µm wet without paint-run)
- Applicable with brush, roller or spray gun (350 to 400µm per coat)
- Applicable on wet surface in difficult conditions, does not run. (10°C and 85% humidity) – Ambient temperature should not underpass 5°C)
- Polymerization under fresh water, brackish water or sea water. Possible immersion 30 minutes after coating
- Very nice glossy aspect and fully extended film

RECOMMENDED USES

EPOXYGUARD IM 409 perfectly suits for treatment and protection of:

- under waterline hull and above waterline hull of steel barges
- under waterline hulls and indoors, or steel boat trunk floors – can be applied directly after abrasive stripping (SA 2.5 minimum – SA 3 recommended)
- Protection and treatment of trunk floors, steel or aluminum ballast (coated with primer EP 2011), or composite.
- Preventive or osmosis curative protection treatment on polyester composites.
- Protection of under waterline hull made of composite polyesters, epoxy, molded wood, CP epoxy, etc...
- Protection primer for wood hulls, under and above waterline hull, decks, indoors, etc...
- Anticorrosive treatment of underground or immersed tanks'outdoors, beacons, locks, jetties, sheet piles, etc...

SPECIFICATION DATA

COATING TYPE: FLEXIBLE TOLERANT TWO-COMPONENT EPOXY

COLOR: White or Black, and other tints according to RAL-AFNOR color charts

ASPECT: GLOSSY

PRESENTATION: TWO-COMPONENT

COMPONENT RATIO:

- Weight (for white only): 100g base + 20g hardener
- Volume: 100ml base for 33ml hardener (3 for 1)

INDUCTION TIME (at 20°C) : not recommended

POT LIFE: 1h30 at 10°C – 30' at 30°C

Temperature	Pot life of the mixture
10°C	1h30
20°C	1h
30°C	30 minutes

THINNER: Thinner EP N°17

DENSITY AT 20°C: 1,56 +/- 0,05 g/cm³

SOLID VOLUME: 85% +/- 3% (ISO 3233)

SOLID WEIGHT: 90.15% +/- 2%

VOC : 175g/l (base+hardener)

THEORETICAL SPREADING RATE: 2,1 m²/ L for 400 µm dry - 1,4 m²/L for 600 µm dry

RECOMMENDED FILM THICKNESS PER COAT:

- Dry: 400 to 510 microns with AIRLESS application
- Wet: 470 to 600 microns max. with AIRLESS
- Dry: 300 to 340 microns max. with spray gun
- Wet: 350 to 400 microns max. with spray gun

DRYING TIME:

Temperature	Dry to the touch	Dry hard
10°C	14 h	24 h
20°C	5h30	5 h30
30°C	3 h	4 h

DRY TIME TO RECOAT

Temperature	Minimum	Maximum
10°C	16 h	Not critical
20°C	4 h30	Not critical
30°C	3 h	Not critical

MAXIMUM TEMPERATURE LIMITS: 90°C dry

SURFACE PREPARATION

All surfaces about to be coated must be free of soil, grease, water stream (surface temperature must be at least 3 points above dew point – check table), dust and moulds.

EPOXYGUARD IM409 must be spread on a compatible system such as EPOXY PRIMER EP211 or directly on aluminum, cast iron, galvanized steel, composites, wood or cp, concrete (see surface preparation datasheet), pickled steel according to Steel Structures painting Council SP10 regulation, or at least Swedish standard regulation Sa2.5 (SA3 recommended). After sanding, steel surface must be 14µm deep and slightly rough. Surfaces must be free of sanding grease.

EPOXYGUARD IM409 can be directly recoated with ACRYTOP PU77, ACRYLTHANE PU 88, POLYTOP PU 99 lacquers, or with UNDERCOAT EP213 or 215 HB.

For other recoating type or surface already painted, refer to our technical service or to our surface preparation guide.

MIXING AND THINNING

Before mixing the components, mix carefully the base portion during at least 10min using a disperser perfectly clean and mounted on an anti-explosion agitator. After mixing the base portion, add the hardener slowly with continued agitation until you get a smooth, homogeneous condition.

As the two components have different viscosities, we recommend scrapping the pot's sides using a spatula. The bottom and sides of the mixture container must be perfectly smooth. Original containers can be used for mixing.

In case of difficult temperature conditions, store the products during 24h at 20°C before using.

Without induction, thinning (n°17) from 0 to 25% is possible according to application conditions and to the material used.

Check viscosity with DIN or AFNOR cups, and readjust it if necessary. For spray gun application, we recommend to check viscosity every 2 hours. Don't forget to mix after each dilution.

Caution: for spray gun application, coat thickness cannot be the same than with Airless application: risk of paint-run and solvent enclosure. Wet thickness by cross coats must remain between 300 and 400µm per application. Flash-off time before recoating will be at least 8h at 20°C instead of 4h30.

APPLICATIONS

APPLICATION METHOD		THINNING	TIP SIZES	PRESSURE
BRUSH	Yes - retouching	5 to 10%		
ROLLER	Yes	5 to 10%		
SPRAY GUN	Yes	10 to 25%	2 to 3.5 mm	3 to 4 BARS
AIRLESS SPRAY	Yes	0 to 10%	0.021" to 0.023"	200/250 BARS

CONDITIONS FOR APPLICATION:

Optimum: 15 to 25 °C for 50 to 70 % HR

Limit: 5 to 35°C for 85 % HR – do not apply out of this temperature range

Surface temperature must be at least 3°C above dew point to avoid any condensation– check table

VISCOSITY : 47" AFNOR N°4 cup with dilution at 20°C

PRECAUTIONS AND SHELF LIFE

See the material safety data sheet and product label for complete safety and precaution requirements

PACKAGING : 4L kits 6 Black or white – (special order: kit 15L in black, white or other tints according to RAL & AFNOR color charts)

CLASS ONU : Base: UN 3082 – Hardener UN 3469

SHELF LIFE: 24 months in original unopened cans between + 10 and + 25 °C. Tropical: 12 months

Store the product away from frost and heat.

FLASH POINT: Base >61°C – Hardener > 61°C

LABEL: F : Flammable Xi : Irritating C : Corrosive N : Dangerous for environment



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