Technical sheet : AC – MONOGUARD

Description of the product

USE:

Fast drying Primer/Finish high performance anti-corrosion coating with universal adherence.

FEATURES:

Single component water-based coating based on a special blend of innovative resins for the protection of metal surfaces, objects and engineered structures against corrosion and weathering. AC-Monoguard is a DTM (Direct-To-Metal) type of coating that can be applied directly to various type of ferrous and non-ferrous metals. Its special formulation and ingredients offer incredible durability when it comes to protecting steel against corrosion, even without priorly blasting the surface.

AC-Monoguard is water-based, easy to handle, safe and has no fire risks. It is a fast-drying coating system that greatly reduces downtime during installation and increases on-site labour productivity.

Virtually odour free, it does not affect neighbouring occupants and can therefore be used in occupied buildings.

AC-Monoguard is UV resistant and its film forms a neat and tidy enamel type of finish.

Tested to be used in the most severe environments, AC-MonoGuard protects valuable assets worldwide 24/7 including bridges, tanks, etc.

Tested according to ISO 12944-5.

Malcode 00-1 / Very Low VOC < 45 g/l

AC-MonoGuard is part of the SCS – Single Coating System - product group.

SUBSTRATES AND AREA OF USE:

- Steel,
- Thin metal,
- Coil coated metal roofs, with various systems,
  If PVDF/PvF2, always contact Technical Department for the right preparation method.
- Aluminum,
- Zinc,
- Stainless steel,
- Old Galvanized and New galvanized steel,
  See preparation of the substrate
- Metallization

- MonoGuard functions well on most type of paint, if the eg. metal roof is maintained on site and if the surface is properly pretreated, and the adhesion for the existing paint is good.

Systems

ISO12944: C2 to C5

Please see ISO12944 Systems under downloads:

https://www.acrymatic.dk/dk/product/monoguard/

Roofs with risks of stagnating water:

Contact the Technical Department for the correct system for your project.

Risks of chemical spills or graffitis:

The system can be top coated by one or two coats of AC-Hydrograff HP Clear High Gloss or Monovar PU

Topcoat:

No top coat are needed.

Application instructions

APPLICATION CONDITIONS:

Ambient temperature: minimum 5°C (41°F) – optimal between 12 and 25°C (54 and 77°F).
Relative humidity: maximum 80%
Surface temperature must be minimum 3°C (5°F) above dew point.

APPLICATION MEANS:

Brush, roller or airless (nozzle size: 010–012)
Application by airless is recommended and makes it easier to reach the recommended thicknesses. Use a device that allows a minimum pressure of 180 bar / 2600 psi at the pump or 130 bar / 1900 psi at the gun.

PREPARATION OF THE SUBSTRATE:

The substrate must be clean: dry, degreased and dust free. Non adhering elements such as older coatings or rust must be removed.

Different type of surface preparation are possible:

1/ Remove rust manually or by power tool to ST2 – ISO 8501-1/SSPC SP2 or SP3.
2/ Blasting to SA 2½ - ISO 8501-1/NACE3/SSPC SP6.
3/ High pressure washing following WJ2 – NACE no.7 min. 1200 bar (Construction steel)
4/ High pressure washing following SSPC SP12 WJ4.
5/ Wa 2 and adhesion of old coating according to ISO 2409 / 16276-2, classification 1

Thin Metal Roofs or Thin Metal Facades:

We recommend using hot water combined with high-pressure this gives the best result.
Avoid water ingress in joints and seams.

Single folded old roof sheets:

High pressure washing following Wa2 – ISO 8501-4 – Max. 300 bar / 30 Mpa.

Double folded sheets:

High pressure washing following Wa2 – ISO 8501-4 - 300 to 800 bar / 30 to 80 Mpa. depending on type of surface.

After cleaning always do adhesion test on the remaining paint, see section “Adhesion existing paint”

Galvanized Steel:

Old Galvanized and New galvanized steel storage protection/passivation of the galvanized steel must be removed before painting. (Contact Technical Department)

Aluminum:

clean with sulfuric acid diluted to 10%. (Contact Technical Department)

Copper:

Clean with hydrochloric acid diluted to 10% and rinse with water. (Contact Technical Department)

Repainting alkyd resin-based paints:

Perform an adhesion test beforehand if the paint is recent or less than a year old.
Optionally, lightly sand the surface before painting.

PVDF / PVF2:

Always contact Technical Department for the right preparation method, before you start the project.

Adhesion existing paint:

Use the following standards:

ISO 2409 – Cross cut test - < 250 µm - Classification 1

ISO 16276-2 – X-cut - > 250 µm - Classification 1

New Rust:

We recommend Max “Light flash rust”

A surface which, when viewed without magnification, exhibits small quantities of a yellow/brown rust layer through which the steel substrate can be seen. The rust (seen as a discoloration) can be evenly distributed or present in patches, but it will be tightly adherent and not easily removed by gentle wiping with a cloth.

Remember:

Always carry out adhesion test on existing paint before starting a project.

Always Contact the Technical Department for the correct preparation method for your project.

DILUTION:

Product is ready-for-use. Dilute with maximum 3% water when applying by airless or in warm weather conditions (> 25°C / > 77°F).

DRYING TIME (20°C - 68°F / RD 60%):

50 microns:

Touch dry: +/- 45 min
Recoatable: +/- 105 min

80 microns:

Touch dry: +/- 1 hours
Recoatable: +/- 2 hours

CLEANING OF TOOLS:

Water

SPECIFICITIES:

Mix well before use.

Technical data

FINISH (Gardner 60°):

- Satin – 30% +/- 5
- Semi-Gloss – 70% +/- 5

COLOURS:

Stock colours: Contact local Agent.

RAL, NCS and Standard colours. Available on dispensing system.

DENSITY:

1.15 +/- 0.05 g/cm³

SOLIDS CONTENT:

In weight: 51 % +/-2
In volume: 43 % +/-2

VISCOSITY:

30 - 50 P (Brookfield 20RPM)

VOC CONTENT:

< 45 g/l

FLASH POINT:

Not flammable

STORAGE:

Minimum 24 months protected from frost and excessive temperatures in its original closed packaging.

Norms and tests

SALT SPRAY	ISO 12944 / ISO 9227 / ISO 4628
WATER CONDENSATION	ISO 6270 / ISO 4628
HARDNESS PENCIL	ISO 15184 *
ADHESION PULL-OFF TEST	ISO 4624
ADHESION X-CROSS CUT	ISO 2409
ABRASION RESISTANCE TABER	ASTM D4060 *
PENDULUM HARDNESS	ISO 1522 *

CHEMICAL RESISTANCE	ISO 2812 *
FLEXIBILITY	ISO 1519
IMPACT RESISTANCE	ISO 6272 *
QUV TEST	ISO 6272 *
RESISTANCE TO HIGH TEMPERATURE	Internal method
	ISO 16000-6 / VOC Classification in France
	Bastaonline.se
MALCODE	00-1

* Tested by RD Coatings.

Safety data

Information related to hygiene and to safety can be found in the Safety Data Sheet available on request.

Notes

Indicated consumption is theoretical and does not consider potential losses during application. It can also be influenced by the porosity of the substrate.

The technical data we provide, like our directions and recommendations, are all based on diverse trials and on our experience. They intend to help the consumer find the most appropriate working method and achieve the best possible result. Since the consumer's working conditions are beyond our control, we cannot assume any responsibility for the results that it achieves in the use of the product. All technical information may be changed without notice, but will always be in accordance with the last revised data sheet, which can be obtained on the phone number below. We reserve the right for typing errors.

This technical data sheet replaces all previous editions.