

EnergyGuard DCC Aluminum



A moisture curing polyurethane aluminum impregnated coating for all types of heat exchangers.

The EnergyGuard DCC Aluminum is an efficiency coating, specially developed for heat exchangers, achieving a long lasting nominal performance.

With the New DCC technology option, an activator, a faster curing will be obtained in combination with an increased adhesion!

The coating systems can be applied before assembly of the unit, before installation or even years after installation.

EnergyGuard DCC Aluminum is a high quality aluminum impregnated coating with perfect sealing properties in combination with an ultimate weathering resistance.

EnergyGuard DCC Aluminum meets the highest requirements on corrosion.

Features

EnergyGuard DCC Aluminum with the perfect sealing properties, the ultimate weathering resistance and its high anti-corrosion performance, is suitable for any type of environment. Test reports, reflecting all types of environments are available.

- ✓ Marine; by ASTM B-117
- ✓ Urban; by ASTM G85
- ✓ UV Weathering; by ASTM D 4587 / 4141
by ISO 11341 / 11507



EnergyGuard DCC Aluminum is resistant to almost all chemical vapor exposure conditions.

As a guideline, use the Maximum Acceptable Concentration (or MAC value), as the exposure condition limit. If the MAC values are exceeded, **EnergyGuard** should be consulted.

A resistance list is available upon request.

EnergyGuard anti-microbial coating systems (Optional)

EnergyGuard anti-microbial coating systems give a lifetime protection against unwanted odors caused by contamination of micro-organisms.

Apart from providing excellent anti-corrosion protection and energy conservation of the total system, these coating systems prevent chemical, galvanic and microbial corrosion by excluding dirt adhesion and growth of micro-organisms to the surface of the coil.

With the option, **EnergyGuard** anti-microbial coating systems prevent growth of fungi, mildew, stain causing bacteria and algae in order to extend the lifetime of your valuable equipment.

Application

The **EnergyGuard** coating system has to be applied with special, high technique spray equipment. It starts with the surface preparation by degreasing, followed by the application of a conversion layer, the **EnergyGuard** Fin Primer.

The chemical reaction with the substrate aluminum, creates an ultimate mechanical bonding, the basis for the durable heat conductive top layer: **EnergyGuard** DCC Aluminum.

The impact of **EnergyGuard** DCC Aluminum on heat exchangers, related to the energy consumption, is negligible. **EnergyGuard** DCC Aluminum can be applied on all types of heat exchangers.

Work process

DCC Activator

With the use of the DCC Activator, 2-4 volume % must be added.

Thinning

The paint can be applied without thinning when using the air mix spray equipment. If required, maximum 10% of **EnergyGuard** Thinner PU 5801 can be added.

Check with the R&D Department.

Pot life

Opened tins should be consumed within 4 hours. Leftovers will cure after opening.

In combination with the DCC Activator, the tins must be used within 1 hour (at 20 °C/68 °F)

Application conditions

In order to obtain the right film formation, the temperature needs to be at least 5 °C/41 °F.

Keep the application area well ventilated during application and drying in order to reduce evaporated solvents. This is necessary to acquire good drying conditions.

Method of application

Preferably by means of air mix spray application. See **EnergyGuard** Operational Manual (E.O.M.).

VOC exempt according to EPA regulations

Coatings and their applications have undergone profound changes over the past forty years.

Many of the most recent changes are responses to federal and state restrictions of organic solvent use to reduce air pollution.

The focus of such regulations has been on reducing emissions of Volatile Organic Compounds or VOC's.

As they evaporate, these compounds react with nitrogen oxides in the presence of sunlight, forming ground level ozone, which is harmful to human health and environment.

Performances

Gloss	Semi Gloss
Color	Aluminum
Volume Solids	52 volume %
VOC	420 g/l - 3,5 lbs/gal
Density	1,10 kg/l – 9,2 lbs/gal (at 20 °C./68 °F)
Dry film thickness	Standard: 20-40 µm - 0,8-1,6 mills
Theoretical coverage	20,8 m ² /l (at a dry film thickness of 25 µm) 850 ft ² /gal (at a dry film thickness of 1 mil)
Heat resistance	Maximum 180 °C/356 °F (dry load)
Drying Times	DCC version: dust free after 0,25 hours (at 20 °C/68 °F)

Environment & Health

Labeling In accordance with EU directions 67/548/EEG and in accordance with directives on hazardous materials.

Harmful and irritating in contact with skin, eyes and by inhalation. In case of eye contact immediately wash with large amounts of water and contact a medical expert. Do not eat, drink or smoke during application.

UN; 1263

Warranty & Disclaimer

The technical data and other printed information furnished are true and accurate to the best of our knowledge. The products are warranted pursuant to acceptance of limited warranty. A copy of which can be obtained from Monopoly BV, which is the exclusive warranty with respect to the sale of this product. The modification of any component or uses not outlined in this bulletin nullifies the warranty unless advance written confirmation is obtained from Monopoly. No other warranties expressed or implied shall apply.

We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, shall be to supply replacement materials as set forth in the limited warranty.