ENERGY GUARD
efficiency coatings for hvac&r equipment

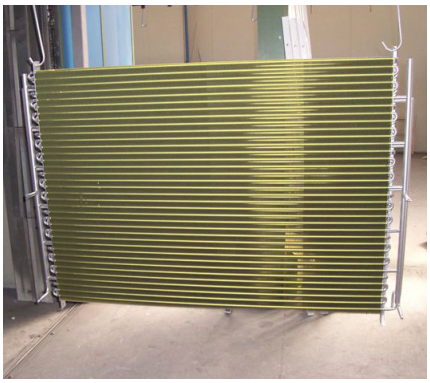
EnergyGuard DCC Yellow

Dual Cure Chemistry DCC Durable Compliant Coatings

A moisture curing polyurethane aluminum impregnated coating for all types of heat exchangers. The EnergyGuard DCC Yellow 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 Yellow is a high quality aluminum impregnated coating with perfect sealing properties in combination with an ultimate weathering resistance.
EnergyGuard DCC Yellow meets the highest requirements on corrosion.
EnergyGuard DCC Yellow is based on a solvent, according the EPA regulations, an exempt.

Features

EnergyGuard DCC Yellow with the perfect sealing properties, the ultimate weathering resistance and it's 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 Yellow 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 Yellow.
The impact of **EnergyGuard** DCC Yellow on heat exchangers, related to the energy consumption, is negligible. Through all the years, **EnergyGuard** DCC Yellow 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 VOC Free PU 5411 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	Yellow metallic
Volume	Solids 52 volume %
VOC; USA	0,8 lbs/gal (95 gr/ltr)
Density	1,35 kg/l - 11,3 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

Application only to be executed by qualified EnergyGuard applicators, according to guidelines in the EnergyGuard manuals.

Warranty & Disclaimer