ABRIGO® corrugated cardboard

EXCOR® ABRIGO® corrugated cardboard combines the proven anti-corrosion effect of EXCOR® with the technical packing benefits of corrugated cardboard – in the form of boxes, cut pieces, punched packaging, and transport cases.

Corrugated cardboard products in the form of boxes, cut pieces, punched packaging, and transport cases are so common that they are regarded as synonymous with packaging itself. They are used in large numbers, including to accommodate products that are susceptible to corrosion. The EXCOR® active anti-corrosion ingredients are applied as a coating and impregnation to the inside of the corrugated cardboard. When an ABRIGO® corrugated cardboard package is sealed, Vapor Corrosion Inhibitors (VCIs) are released into the enclosed space in an even concentration. They form an invisible adsorption film on the metal surfaces and provide effective protection against corrosion. The corrosion protection works both in direct contact and via the vapor phase. When the package is opened, the inhibitors evaporate without leaving a residue. The packed goods can be used without cleaning or further processing. It is even possible to open and re-seal the packaging several times to remove goods. The anti-corrosion properties meet the standards of TL 8135-0002, Level 3.

ADVANTAGES

corrosion protection is an integral part of the packaging

this reduces the work involved

extensive experience in the development of automated filling and packaging processes

no danger from skin contact or inhalation if used properly

meets TL 8135-0002, Level 3

EXCOR®: The corrosion protection that comes from the packaging!

Protective effect*

Type E: steel, cast steel, partly galvanized steel, Cr, Al 4xxx (Si > 7%), cast iron

Type NE(C): Cu, brass, Al 2xxx (Cu) and 5xxx (magnesium) possible

Type MM: steel, galvanized and tin-plated steel, Cu, brass, aluminum 2xxx (Cu), Al 4xxx (Si > 7%), 5xxx (Mg), 6xxx (Mg, Si), 7xxx (Zn), other Al alloys on request, combinations of the above metals

Type A: steel, galvanized steel, Cu, brass, aluminum 2xxx (Cu), Mg alloys possible, cast iron

* For metal parts with unusual surface finishes, e.g. very rough surfaces or adhesive residues from processing agents, it is advisable to carry out tests using model packaging in a climate that simulates actual conditions before using EXCOR® VCI materials on a large scale. Climate test cabinets and chambers (up to a volume of 16 m³) are available for this purpose at EXCOR® Korrosionsforschung GmbH in Dresden.

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Technical data

Brief description	EXCOR® ABRIGO® corrugated cardboard is an anti-corrosion material based on corrugated cardboard, treated with an EXCOR® VCI coating solution with integrated VCI active ingredients and contact inhibitors.
Protection volume	The suggested packaging volume depends on the internal structure of the package and how easy it is for the VCI chemistry to reach the goods that require protection. In a compartment structure in which the dividers are VCI-coated, possibly with coated interlayers, there are no volume specifications. With individual packages that are intended for overseas shipment, a package volume of 30 l should not be exceeded. The load on the corrosion protection system depends on many factors including packaging design, logistics processes and prior metalworking treatments. Please consult our applications engineers for technical coordination and corrosion testing for your project.
Development phase of the active ingredient	Approx. 1 hour at a temperature of 20 °C. The closer the packed goods that require protection are to the VCI dispenser, the shorter the development phase. Effective period: up to 2 years – depending on individual conditions, the design of which should be developed with the user.
Storage	EXCOR® ABRIGO® corrugated cardboard can be stored for up to 2 years as delivered in its sealed packaging and protected from direct sunlight, moisture, and dirt.
Specifications for loading, transport, and storage	The parts to be packed should be approximately the same temperature as the ambient air. The parts that require protection should be protected from corrosion-promoting perspiration during handling by wearing protective gloves. For longer transport by land or sea, it is advisable to secure the entire load unit with stretch or shrink film.
Quality assurance	For each production run of VCI packaging, EXCOR® checks representative samples for the content of corrosion inhibitors. The emission rate of the VCI components is checked by sampling. TÜV Süd certifies the testing, measurement methods, and QM processes used.

ISO 9001 Certified Quality Management System
www.tuv-sud.com/ms-cert

Delivery forms

Folding boxes

Pop-up boxes

Punched packaging

Compartments

Available in all types of corrugated cardboard, corrugated combinations, and thicknesses

Multicolored printing

- F-flute corrugation
- E-flute corrugation
- B-flute corrugation
- C-flute corrugation
- FE-flute corrugation
- EB-flute corrugation
- BC-flute corrugation

Disposal

Can be recycled for materials or energy in accordance with local regulations. Observe safety datasheet.

Health

Classification not required under 1272/2008/EC (CLP Regulation on Classification, Labelling and Packaging of Substances and Mixtures).

No risk to the skin in dermatological testing.

No monitoring under TRGS 615 and TRGS 900.

Contact us at:

ZERUST EXCOR

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EXCOR Korrosionsschutz-Technologien und -Produkte GmbH

Tonlandstraße 2
34346 Hann. Münden
Germany

Tel.: +49 5541 7062-00
Fax: +49 5541 7062-10
info@excor.de, www.excor.de