

FUCHS Industrial Lubricants

For extra process reliability

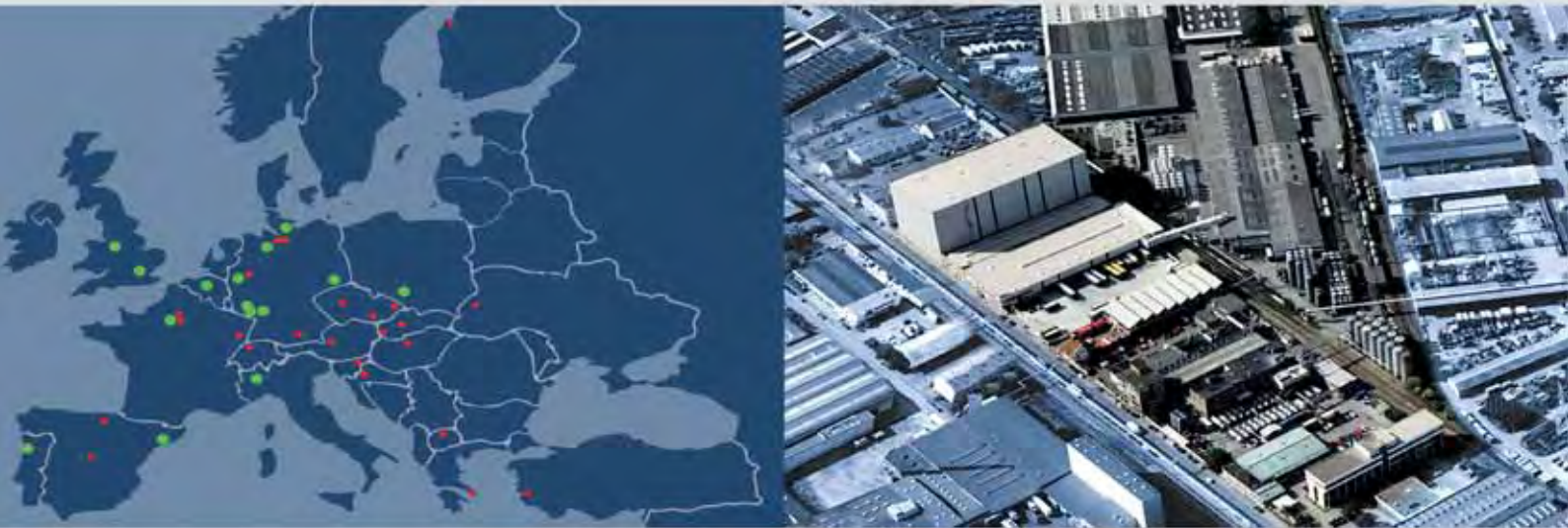


ANTICORIT VCI
Vapour phase corrosion protection



FUCHS EUROPE SCHMIERSTOFFE GMBH

YOUR STRONG GLOBAL PARTNER



HOW WE EXCEL

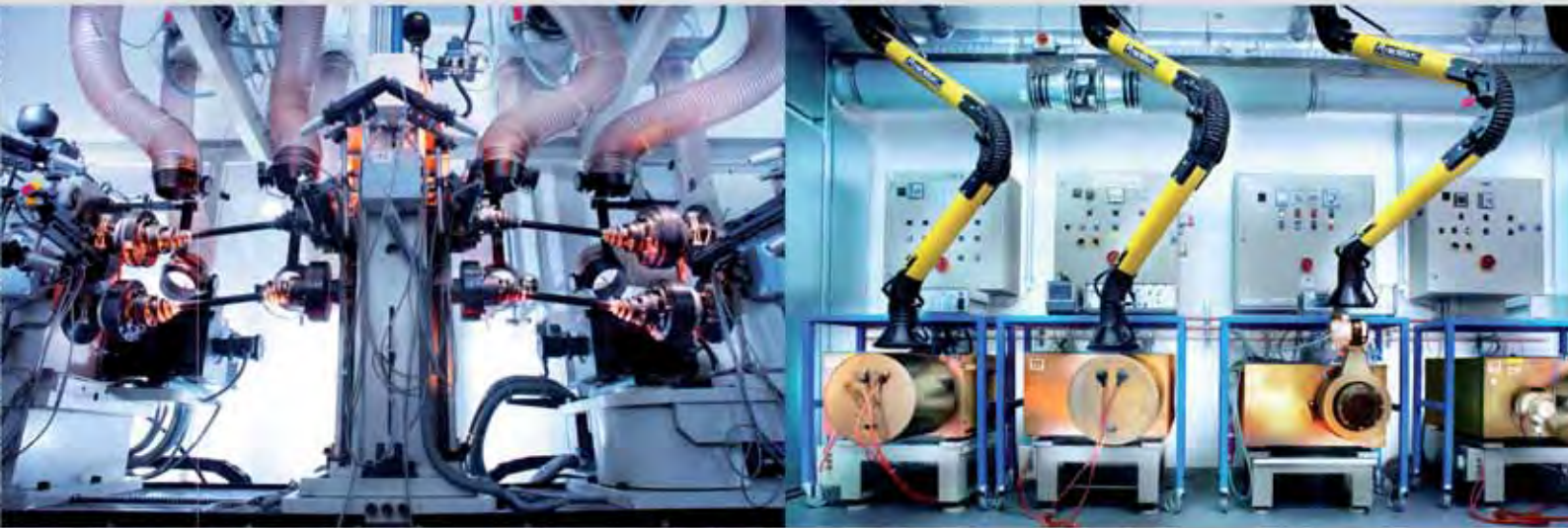
We are a German company whose almost 600 employees manufacture and market a wide range of lubricants and derived specialties. The company, which was founded in 1931 as RUDOLF FUCHS, is located in Mannheim and is a 100 % subsidiary of FUCHS PETROLUB AG, which is the largest independent lubricants manufacturer worldwide.

Our company's degree of specialisation and innovation is way above the industrial average in this field. The full product line includes almost 2,000 lubricants and derived specialties for all walks of life, industrial processes and applications. Our customer's success is also our success. Because partnership to us means passing-on benefits.

The advantage of a strong market presence: FUCHS is the largest independent manufacturer of lubricants in the world. The benefit of premium, innovative products from a full-line manufacturer: With a complete product line as well as tailor-made special solutions, FUCHS has a product for every application. The benefits of reliability: Certified according to DIN EN ISO 9001:2000 and ISO/TS 16949:2002, FUCHS has been continuously upgrading its highly specialised lubricants for decades.

And naturally, partnership for us also means providing our customers with competent support. With comprehensive marketing. With high-performance logistics. With the development of successful service concepts. And qualified consulting. Because together, we can achieve more.

FOR INDUSTRIAL LUBRICANTS



WHAT INCREASES THE VALUE OF OUR PRODUCTS

We develop lubricants: application-specific and tailor-made for our customer's processes. Together we look for the best lubricants for our customers. This cooperation is unique in terms of its form, scope and intensity. We call it **development partnership**. The success of our development partnerships is based on an important fact: FUCHS is not one of the oil-giants.

FUCHS is a multinational, independent lubricant manufacturer. Our independence is the difference. We are open to new solutions, open for visions – the prerequisites for innovations. And innovation is the defining characteristic of FUCHS. 70 % of our products are less than five years old and the great majority of our products are individual solutions. Challenge us and see!



DIN EN ISO 9001:2000
ISO/TS 16949:2002
DIN EN ISO 14001:2004
REG.NR. 2476



ANTICORIT VCI: Vapour phase corrosion protection.

Cleaning



Corrosion protection



Surfaces for subsequent manufacturing processes may have to be oil-free and clean. There are a number of different types of cleaners.

Corrosion protection is generally specified for storage and transport.

Water-rinsable cleaners

RENOCLEAN UWF	Water-rinsable cleaner. Free of aromatics. Contains VOC*.
RENOCLEAN KU	Odor-optimized, water-rinsable cleaner. Free of aromatics. Contains VOC*.
RENOCLEAN KLV	VOC*-free, universal solvent-based cleaner. Perfect for industrial, workshop and domestic applications.

Water-based alkaline (sprayable cleaners)

RENOCLEAN VR 1021-SERIES	Medium-alkalinity. For use at temperatures between +35 °C and +60 °C.
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Water-based alkaline (submersion cleaners)

RENOCLEAN SPEZIAL 2000	Medium-alkalinity. Universal application such as components, floors, etc.
RENOCLEAN VR 1798/2	Medium-alkalinity. Universally suitable for steel and aluminium. Also for ultrasonic cleaners.

*VOC = Volatile Organic Compounds.

Dewatering fluids

ANTICORIT DF SERIES	High-speed dewatering fluids. Form thin, highly-effective, oily-, waxy- or lacquer-like corrosion protection films. Also available in versions without film for pure, stain-less drying.
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Corrosion protection

ANTICORIT OHK SERIES	Corrosion protection concentrates and ready-to-use versions with white spirit, isoparaffins and oils to protect all metals. Outstanding fingerprint-remover properties.
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Water-based corrosion protection

ANTICORIT MKR SERIES	Water-miscible corrosion preventives for the cleaning and interim protection of semi-finished components, phosphated parts and components used in the potable water sector. Also a hydraulic water and coolant additive.
ANTICORIT SKR SERIES	Water-miscible, mineral oil-free and low-foaming additives for cooling and hydraulic water.

Vapour phase inhibitors

ANTICORIT VCI SERIES	Advanced VCI technology for the protection of all metals. Available as VCI paper, film, powder, tablets or oils. Tailor-made solutions for corrosion protection and packaging.
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VCI films



VCI films are available as film tubes, half-film-tubes, flat films and individually-sized bags in thicknesses of 40–200 microns and with diverse tear-resistances. Available with or without printed company name.

Universal

ANTICORIT
VCI UNI-FI

Available as:
– Films
– Sachets
– Side-gusseted bags
– Tubes or half tubes
and on rolls and as tear-off items in a large number of sizes.

VCI papers



VCI papers are both packaging and corrosion protection in one. The advantage: Very simple to use. VCI papers are available, tailor-made for all applications. Available with or without printed company name.

Universal

ANTICORIT
VCI UNI-P

Available as rolls or sheets at grammages of 50 g/m² – 90 g/m² for universal use.

For ferrous metals

ANTICORIT
VCI FE-P

Available as rolls or sheets at grammages of 50 g/m² – 90 g/m² for protection of steel and iron.

For steel and iron: Creped paper

ANTICORIT
VCI FE-P K

Available as rolls or sheets at grammages up to 200 g/m² for protection of steel and iron.

For steel and iron: PE-coated creped paper

ANTICORIT
VCI FE-P KPE

Creped paper with additional PE coating. Available as rolls or sheet at grammage of 160 g/m².

While the information and figures given here are typical of current production and confirm to specification, minor variations may occur. Subject to amendment.
Edition 09/2008

The optimum lubricant for every stage in the process.

VCI powders and sponges



VCI powder is a pure corrosion inhibitor formulated to protect a number of metals. Filled into permeable paper sachets, these are simply placed among the packaged parts.

Universal powders

ANTICORIT VCI UNI-S Available as powder and powder sachets in sizes of 10 g and 25 g.

Universal granulate

ANTICORIT VCI UNI-G Available as granulate and granulate sachets in various sizes.

Universal tablets

ANTICORIT VCI UNI-T Available in packet sizes of 1,000 x 1 g.

Universal sponges

ANTICORIT VCI UNI-F Examples: Pads, packaging foam/sponges in various sizes and thicknesses. Available on rolls or as tear-off items.

VCI fluids



VCI fluids can be simply sprayed on the components to be protected or on the wrapping paper or cartons they are in.

Oil

ANTICORIT UNI-O-40 This is a special oil which releases corrosion-inhibiting VCI vapours. These then protect all metal surfaces in a sealed system such as tanks or gearboxes without the oil having to wet the surfaces.

Solution

ANTICORIT UNI-W 50 and ANTICORIT FE-W 50 These products are simply sprayed onto the parts to be protected, on foam packaging or on the internal surfaces of cartons. After the water dries, a thin, dry and highly-effective film remains. VCI fluids are also used to improve the corrosion protection properties of cleaners, metalworking fluids and other water-based products.

Fluid

ANTICORIT UNI-IP 30 Primarily for the mechanical application of corrosion protection in deep-drawn holders, trays or other racks. Using the specially-developed and patented spraying system, even sea-freight containers can maintain a protective VCI atmosphere over longer periods of time. Costly and time-consuming packaging is thus eliminated.

The complete lubricants program from the specialists.

All from one supplier

ANTICORIT VCI corrosion preventives are fully compatible with all previous process stages such as cleaning, forming and temporary corrosion protection.

Cross-compatibility is constantly monitored in our own, state-of-the-art research facilities and laboratories. This guarantees a reliable process chain starting with cleaning, to metalworking, through to corrosion protection.

As well as constant monitoring, we regularly add new products to our program.

Apart from conventional products and solutions, we also offer products which conform to national environmental legislation and/or VOC regulations.

Decades of experience, far-reaching know-how, global approvals from leading manufacturers and our local experts make our product program unique.

The benefits of FUCHS system products:

- Intensive consultation, optimum service – worldwide
- Full range of products – all from one supplier
- Fully compatible products
- No process failures caused by product incompatibility
- Thorough testing in in-house facilities
- Close cooperation in obtaining approvals

For optimum process reliability.



Ask the specialists:

The FUCHS check list for a product recommendation.

Based on this questionnaire, we can tell you which is the best corrosion protection for your particular needs.

Your address

Company/customer: _____

Street: _____

City: _____

Contact/function/dept.: _____

Phone: _____

Fax: _____

E-mail: _____

Which product do you currently use?

Forming lubricant: _____

Cleaner: _____

Corrosion protection: _____

Simply copy, complete – as far as possible – and fax back to +49 621 3701-414.

Corrosion protection

Application:

Description of the application

Material: Steel Electrogalvanized Aluminium _____
 Ferric Hot-galvanized Gray cast iron

Surface of the parts: Dry Wet Chemical clean Rough Blank
 Clean Dirty Sand blasted Polished _____

Packing: None In μm PE film Individual packaging Closed packaging
 In greaseproof paper In μm VCI film In racks Open packaging
 With VCI On greaseproof paper _____

Transport: No transport National Sea freight on deck _____
 Regional Within Europe Sea freight below deck

Storage conditions: Warehouse Tropical climate Cold climate Temperature: _____
 Shed Subtropical climate Monsoon conditions Humidity: _____
 Outdoors Temperate climate Coastal region _____

Desired time of corrosion protection: Up to 1 week Up to 3 month Up to 1 year Up to 3 year
 Up to 1 month Up to 6 month Up to 1 1/2 year Over 5 year

Coating: No coating Waxy $< 2 \mu\text{m}$ $> 5 \mu\text{m}$
 Oily Vaseline $2 - 5 \mu\text{m}$ _____

Characteristics of the corrosion preventive: Non-thixotropic VCI agent Solvent A II Aqueous _____
 Thixotropic VOC-free Solvent A I Ba-free

Application: Dipping Brushing Hot application Temperature: _____
 Spraying Wiping Drying possible _____

Process:

Kind of process before corrosion protection

Approvals:

Kind of process after corrosion protection

Needed approvals

Competitor product: Product: _____ Trading unit: _____ Sample available

Problems:

Are there any problems with the actually used corrosion protection product?

Demand p.a.:

Packaging unit:

Photo or drawing of the part:

Signature: _____

Date: _____

FUCHS Industrial Lubricants

Innovative lubricants need experienced application engineers

Every lubricant change should be preceded by expert consultation on the application in question. Only then the best lubricant system can be selected. Experienced FUCHS engineers will be glad to advise on products for the application in question and also on our full range of lubricants.



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