

ANTICORIT

VCI Corrosion Protection



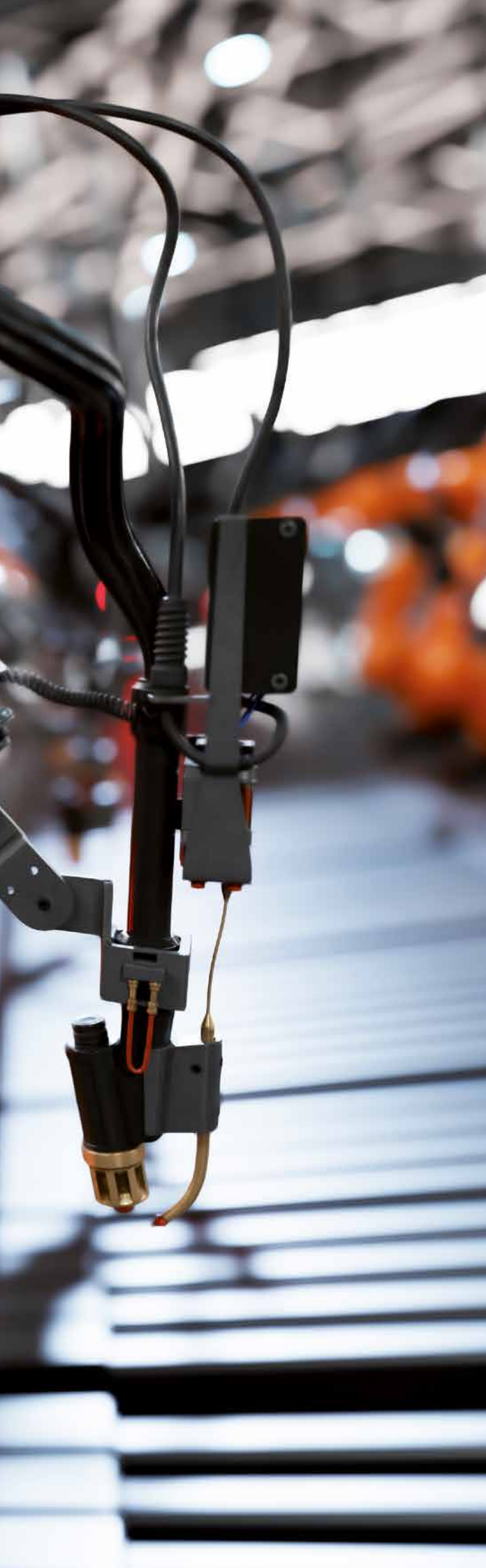
MOVING YOUR WORLD



FUCHS LUBRICANTS GERMANY

We don't just develop lubricants. For highly complex challenges in a wide range of industries, we develop innovative lubricant solutions that enable the mobility of tomorrow. Our goal: to keep our customers' world in motion. Efficient, sustainable, reliable. Today and tomorrow.

What can we move for you?



FUCHS LUBRICANTS GERMANY

Facts and figures

Company: FUCHS LUBRICANTS GERMANY GmbH,
a company of the FUCHS Group

Locations: Mannheim, Dohna, Kaiserslautern, Kiel and Wedel;
approx. 1,400 employees

Product range: A full range of more than 3,000 products
for all application areas

Certifications i. a.: ISO 9001, IATF 16949, ISO 14001,
ISO 45001, ISO 50001, ISO 21469, HALAL, KOSHER
(detailed certifications at www.fuchs.com/de/en)

Gate-to-Gate CO₂-compensated**

FUCHS LUBRICANTS GERMANY is a subsidiary of FUCHS SE, the world's largest independent supplier of lubricant solutions. Around 1,400 specialists at the headquarters in Mannheim and the sites in Kaiserslautern, Wedel, Kiel and Dohna work with dedication on innovative lubricant solutions that enable the mobility of tomorrow.

The high level of technical consulting expertise combined with the largest, nationwide network of its own technical contacts makes FUCHS LUBRICANTS GERMANY a reliable local partner. A comprehensive product range, supplemented by digital offerings and Smart Services, as well as many years of lubricant expertise and a high level of research competence are the foundations for the innovative FUCHS lubricant solutions. They reduce wear and energy consumption, extend the running times and service life of machines, and thus keep the world moving – from industrial motors and e-cars to wind turbines and washing machines. FUCHS LUBRICANTS GERMANY is certified according to a wide range of standards and, as a technology leader and development partner, places the highest demands on quality management.

Customers in all industries benefit from this quality management: automotive suppliers and OEM, mechanical engineering, metal processing, mining and exploration, aerospace, energy, construction and transport, agriculture and forestry, as well as the paper, steel, metal, cement, forging and food industries, but also qualified lubricant dealers, car dealerships and workshops.

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*Gate-to-Gate Scope includes GHG-Protocol Scope 1, 2 and selected Scope 3 emissions (water, waste, business travel, commuting)

FIRST-CLASS CORROSION PROTECTION

VCI corrosion protection is the efficient and clean way to protect metals against corrosion. We offer you a wide variety of different and innovative ANTICORIT VCI production range and guide you with our experience through all question regarding corrosion protection and develop new corrosion protection concepts for your use case.

Top rating for our ANTICORIT VCI films

Our ANTICORIT VCI films are not only certified according to VW test methods and their effectiveness. They have also achieved the the best possible grade – an 2.0. A clear proof of our quality.

Advantages of the ANTICORIT VCI technology

- Effective protection against corrosion – even without direct contact of metal surface and ANTICORIT VCI product
- Corrosion protection for up to several years
- Packaging material and corrosion protection in one
- We optimize our ANTICORIT VCI products to help you reduce plastic packaging material and to find recycable materials
- Easy to dispose
- Complies with TRGS 615
- No restrictions according to TRGS 900
- Harmless to health

= VCI is the worthwhile alternative or supplement to the classic corrosion protection

Easy packaging, optimally protected

Do you intend to ship or store your components corrosion-free, dry, clean and ready for further processing without the need of extra cleaning? Then our ANTICORIT VCI products are just right for you!



Part without ANTICORIT VCI protection

Part with ANTICORIT VCI protection

How do ANTICORIT VCI products work?

VCI is short for Volatile Corrosion Inhibitor.

VCI materials create an atmosphere with a highly effective corrosion protection. The active substances migrate through the air inside the packaging to the metal surface and form a homogeneous ultra thin layer. This creates a barrier between the metal and corrosive substances.

VCI is not only effective in direct contact with metal, but also at a distance. The VCI molecules also reach places that are difficult to access and even penetrate into cavities, threads or drill holes.

Even if the packages are opened briefly is quickly rebuilt after sealing. So opening the packages for short inspection or to take out parts is possible.

How to store and dispose our VCI products?

Stored in a cool and dry place in the original packaging, you can store our ANTICORIT VCI products for several years. Since the materials releases small amounts of active substance when exposed to air, they should always be stored in an airtight packaging.

The ANTICORIT VCI materials are recyclable: paper can be disposed with other waste paper, ANTICORIT VCI foils and twin-wall sheets can be recycled.

ANTICORIT VCI is free of nitrite and does not contain any other toxic substances.

ANTICORIT VCI does not leave any permanent residues. Cleaning or after-treatment is therefore not necessary – the metal parts can be used again immediately.



How to apply ANTICORIT VCI products?

Our ANTICORIT VCI products serve as the only or additional packaging material for metal parts. The handling is simple – especially when compared to oiling. Tanks or application equipment are not needed to provide VCI corrosion protection.

To gain the full effect of VCI corrosion protection and to make the VCI atmosphere, it is only necessary to follow a few simple rules:

- Metal parts should be dry and clean – and free of fingerprints.
- Before packaging, the metal should be acclimatised to ambient temperature.
- The distance between the metal and the VCI packaging material should not exceed 30 cm for steel and 15 cm for non-ferrous metals.
- Seal the packaging well and, if opened during shipping and storing, close the packaging short after, so that as little active ingredients are lost to the surroundings.

When the metal parts are unpacked, the VCI molecules volatilise within a short time.

ANTICORIT VCI papers – pure corrosion protection

ANTICORIT VCI papers are used as an intermediate layer in packages, can be combined with ANTICORIT VCI film, and can be used as inliner for boxes. You can also directly wrap your products. We supply our VCI papers in the form of individually cut sheets or on rolls of different widths – whatever is best for your process chain.



Crepe paper with high resistance against being torn apart and extra corrosion protection.

The paper thickness can be chosen depending on the mechanical stress. We provide papers with a grammage between 50 and 160 g/m².

Do you need to protect your products not only against rust, but also against external influences such as humidity? Then our polyethylene-coated papers are the right choice for you. For heavy components with rough edges we offer an robust, elastic crepe variant – if needed with a single sided PE coating to add even more resistance.

The VCI molecules evaporate on both sides, which is why the paper is particularly suitable as an intermediate layer. Even under extreme climatic conditions excellent corrosion protection is provided. This is how you pack steel, aluminum or non-ferrous metals securely.

Benefits of our ANTICORIT VCI paper

- Corrosion protection on both sides
 - Fast protection after packaging process
 - Available in different dimensions and designs
 - High compatibility with other plastics and paints
-

ANTICORIT VCI films: Ease of use

ANTICORIT VCI film are made of transparent, tear-resistant polyethylene material. You can quickly and easily add long-term protection to avoid corrosion by water, dirt and salt. And they work with steel, copper and other metals.



ANTICORIT VCI air bubble films protect your parts against corrosion, mechanical damage and dust

You can use the film just like any other commercially available PE film. Standard devices and equipment are suitable for manual or automatic wrapping without further adaptation. ANTICORIT VCI films are stretchable and can easily be sealed. They are therefore ideal for automated packaging.

The films are available in various thicknesses and designs: from rolls to cut-to-size pieces and tubes as well as hoods, bags and inserts with customer specific sizes and prints.

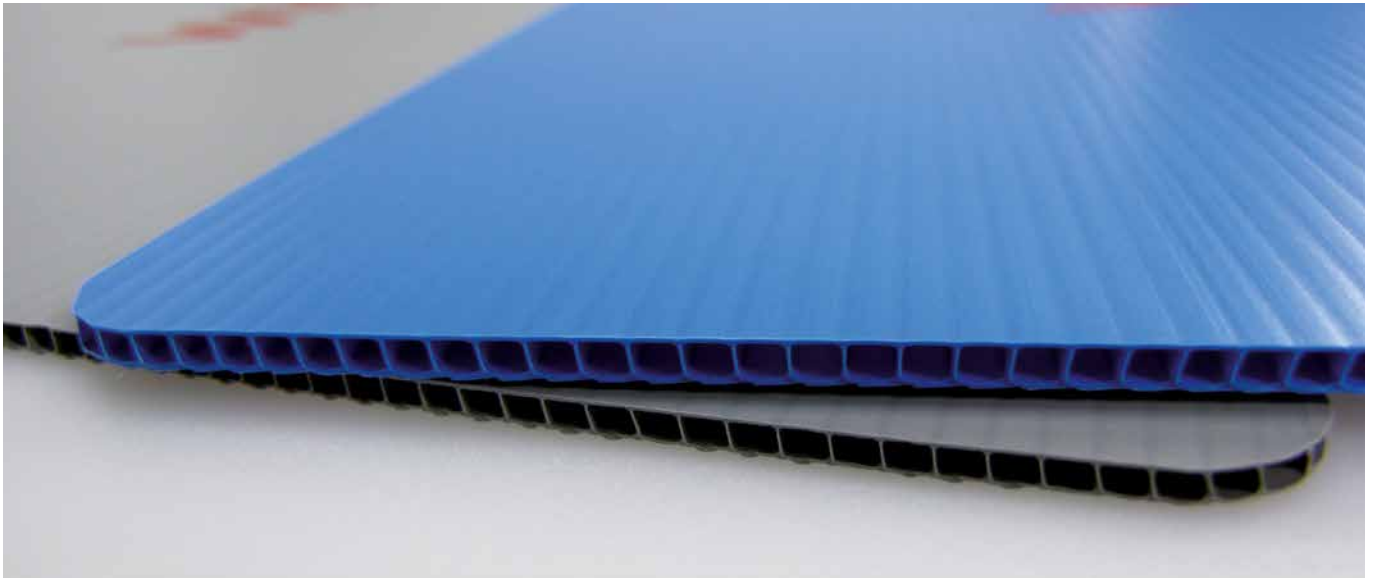
There are VCI films with extra endurance when exposed to UV light, VCI films with antistatic properties for packing electronics, with high mechanical resistance against tearing, that are shrinkable, ready for stretch packaging and have air bubbles to protect delicate parts from mechanical damage.

Benefits of our ANTICORIT VCI films

- Corrosion protection on both sides
 - Excellent suitability for automated packaging
 - Transparent film = packaging contents can easily be visually inspected
 - No fiber abrasion
 - Protection against moisture
 - High compatibility with other plastics and paints
-

ANTICORIT VCI TWS the twin wall sheets to protect your parts against corrosion and to keep them clean

ANTICORIT VCI TWS sheets are twin-wall sheets made of polypropylene. They can be used as an interlayer when heavy parts are stacked. Despite their low weight, they are extremely stable and resistant to tearing, abrasion and breakage. This makes them a robust packaging material and highly effective corrosion protection in one product.



Our ANTICORIT VCI TWS sheets are an efficient alternative to corrugated cardboards or other cardboard packagings. You can use them as dividers inside a package, for intermediate layers between stacked parts, or as a lining of pallet cages. Depending on the parts to be packaged, thicknesses from two to five mm and various grammages from 300 to 1,500 g/m² are available.

The twin-wall sheets preserve steel, galvanized steel, zinc, nickel, aluminum and chrome from rust. even cast iron is effectively protected when in direct contact.

Advantages of our ANTICORIT VCI TWS twin-wall sheets

- Long-lasting corrosion protection on both sides
 - Excellent for separating metal parts from each other and protect them from corrosion at the same time
 - Abrasion-resistant
 - Withstands extreme transportation conditions and high stresses and strains
 - Can be used multiple times
-

ANTICORIT VCI specialities – high efficiency for special needs

Besides VCI papers, films and twin wall sheets we offer VCI solutions that are suitable for your special requirements.



ANTICORIT VCI UNI IP 30

- No direct application on metal surfaces needed, simply add to the
- Highly concentrated VCI protection
- VCI fluid with best corrosion protection properties
- Protects both ferrous and non-ferrous metals such as copper, brass, bronze etc.
- Typical consumption: just approx. 200ml/m³*

ANTICORIT VCI UNI O 40

- No direct application on metal surfaces needed, simply add to the cavity
- Highly concentrated VCI protection
- Protects both ferrous and non-ferrous metals such as copper, brass, bronze etc.

- Designed to protect fuel tanks, gear boxes, and other cavities when compatibility with other mineral oil based fluids such as hydraulic oils and gear box oils is needed.
- Typical consumption: just approx. 300–400 ml/m³*

ANTICORIT VCI UNI S powder bags and tablets

- Easy application
- Protects ferrous and non-ferrous metals such as copper, brass, bronze etc.
- Typical consumption: just 50g/m³*

ANTICORIT VCI foam

- Easy to use
- Protects both ferrous and non-ferrous metals such as copper, brass,

bronze etc.

- Combines excellent cushioning with strong corrosion protection
- Excellent for sensitive parts such as electric components, lab equipment and precision spare parts

ANTICORIT VCI-Duplex cardboard

- Free of abrasion
- Protects iron, steel, zinc, chrome, copper, brass, bronze, pure aluminum and others
- Ideal for intermediate layers or compartments
- High time saving, as packaging and corrosion protection can be applied in one step.
- Harmless to health
- Easy to recycle and dispose

*depending on targeted protection period and density of packaging

ANTICORIT VCI corrosion protection overview

ANTICORIT VCI film products

Name	Type	SKU number	Dimensions [mm]	Thickness [μ]	Packing units [pieces per unit]
ANTICORIT VCI F P 100	zip lock bag	800232762	100x150 + 25	100	1,000
ANTICORIT VCI F P 100	zip lock bag	800232748	150x200 + 25	100	1,000
ANTICORIT VCI F P 100	zip lock bag	800232755	200x300 + 25	100	1,000
ANTICORIT VCI F P 80	zip lock bag	800227676	300x400 + 30	80	500
ANTICORIT VCI F P 80	flat bag	800217318	150x200	80	1,000
ANTICORIT VCI F P 80	flat bag	800217301	200x300	80	1,000
ANTICORIT VCI F P 80	flat bag	800180605	300x400	80	500
ANTICORIT VCI F P 100	flat bag	800250025	300x400	100	1,000
ANTICORIT VCI F P 80	flat bag	800220820	400x500	80	500
ANTICORIT VCI F P 100	flat bag	800186003	400x600	100	500
ANTICORIT VCI F P 100	flat bag	800291455	620x620	100	300
ANTICORIT VCI F P 80 SF	gusseted bag	800241900	300/200x500	80; strong and resistant	500
ANTICORIT VCI F P 50 SF	gusseted bag	800244062	400/300x535	50; strong and resistant	500
ANTICORIT VCI F P 80 SF	gusseted bag	800180612	430/320x500	80; strong and resistant	250
ANTICORIT VCI F P 80	gusseted bag	800180629	430/320x600	80	250
ANTICORIT VCI F P 80	gusseted bag	800243614	430/320x700	80	250
ANTICORIT VCI F P 80	gusseted bag	800219398	630/420x800	80	200
ANTICORIT VCI F P 100 SF	gusseted bag	800180568	830/625x1.200	100; strong and resistant	200
ANTICORIT VCI F P 100	gusseted bag	800244994	830/625x1.500	100	50
ANTICORIT VCI F P 100	gusseted bag	800180520	1,230/825x1,400	100	50
ANTICORIT VCI F P 100	gusseted bag	800231154	1,250/850x1,600	100	50
ANTICORIT VCI F P 80	gusseted bag	800216816	1,250/850x1,800	80	750
ANTICORIT VCI F P 80 SF	gusseted bag	800250629	1,250/850x1,800	80; strong and resistant	50
ANTICORIT VCI F P 100	gusseted bag	800180575	1,250/850x1,800	100	50
ANTICORIT VCI F P 100	gusseted bag	800180582	1,250/850x2,000	100	50
ANTICORIT VCI F P 80 SF	gusseted bag	800285614	1,130/1,020x1,600	80; strong and resistant	500
ANTICORIT VCI F P 80 SF	gusseted bag	800285607	1,230/1,120x2,050	80; strong and resistant	250
ANTICORIT VCI F P 120	gusseted bag	800213723	1,275/1,075x1,800	120	500
ANTICORIT VCI F P 100	gusseted bag	800180513	1,550/1,230x1,800	100	30
ANTICORIT VCI F P 120	gusseted bag	800230317	1,950/1,250x2,150	120	50

ANTICORIT VCI flat film* / tube

Name	Type	SKU number	Width [mm]	Thickness [μ]	Running meter [lfm]
ANTICORIT VCI F 100 P	flat film*	800211903	1.000	100	500
ANTICORIT VCI F 100 P	flat film*	800220905	1.500	100	500
ANTICORIT VCI F 100 P	flat film*	800241603	4,000 folded to 1,100	100	100
ANTICORIT VCI F 120 P	flat film*	800257949	4,000 folded to 1,100	120	50
ANTICORIT VCI F 120 P	flat film*	800257956	6,000 folded to 1,600	120	50
ANTICORIT VCI F 150 P	flat film*	800181268	4,000 folded to 1,100	150	100
ANTICORIT VCI F 120 P	tube	800228000	360	120	300

ANTICORIT VCI air bubble flat film

Name	Type	SKU number	Width / length [mm]	Thickness [μ]	Running meter / peaces per packing unit [lfm]
ANTICORIT VCI F P 80 AB	air bubble flat film	800229328	1.500	80	100
ANTICORIT VCI F P 80 AB	air bubble flat bag	800303899	400x600	80	200
ANTICORIT VCI F P 100 AB	air bubble flat bag	800298263	200x500	100	400

ANTICORIT VCI stretch

Name	Type	SKU number	Width [mm]	Thickness [μ]	Running meter [lfm]	Peaces per packing unit [pcs / unit]
ANTICORIT VCI F 30	manual stretch	800226273	500	30	230	6
ANTICORIT VCI F 30	automated stretch	800253125	500	30	1.200	2

ANTICORIT VCI TWS the twin wall sheets**

Name	Type	SKU number	Dimensions [mm]	Thickness [g / m²]	Peaces per packing unit [pcs]
ANTICORIT VCI TWS	twin wall sheet 2 mm	800180704	730x540	350	1.050

*ANTICORIT VCI air bubble flat film are available in different dimensions on request.

**ANTICORIT VCI TWS the twin wall sheets are available in different grammages and dimensions on request.

ANTICORIT VCI corrosion protection overview

ANTICORIT VCI powder and tablets

Name	Type	SKU number	Dimensions [mm]	Weight [g]	Peaces / packaging unit [pcs]
ANTICORIT VCI UNI S	powder bag	800402059	100x125	25	500/box
ANTICORIT VCI EMITTER S	boxed VCI emitter	800306203	50x50+25	33	140/box
ANTICORIT VCI EMITTER L	boxed VCI emitter	800306197	80x50-25	47	70/box
ANTICORIT VCI UNI T	tablets	800139009	5	1	1,000/box

ANTICORIT VCI foam

Name	Type	SKU number	Dimensions [mm]	Thickness [mm]	Peaces / packaging unit [pcs]
ANTICORIT VCI S	foam pad	600970963	50x50	6	5,200/box
ANTICORIT VCI S	foam pad	600986346	300x400	6	200/box
ANTICORIT VCI S	foam pad	601391538	270x230	6	400/box
ANTICORIT VCI S	foam pad	601368349	1.370x220	6	25/box

ANTICORIT VCI paper*

Name	Type	SKU number	Dimensions [mm]	Packaging unit
ANTICORIT VCI P 50	–	800180735	1,000	51 KG roll
ANTICORIT VCI P 60	–	800252227	1,000	23 KG roll
ANTICORIT VCI P 70	–	800180674	1,000	51 KG roll
ANTICORIT VCI P 90 PE	–	800186706	1,000	51 KG roll
ANTICORIT VCI P 130 K	–	800180742	1,000	51 KG roll
ANTICORIT VCI P 160 KPE	–	800213624	1,000	51 KG roll
ANTICORIT VCI P 50	sheet	800400680	170x285	1,000 pcs/box
ANTICORIT VCI P 50	sheet	800185013	240x330	1,000 pcs/box
ANTICORIT VCI P 50	sheet	800255259	550x950	500 pcs/box
ANTICORIT VCI P 60	sheet	800286451	800x1,200	500 pcs/box
ANTICORIT VCI P 70	sheet	800181619	800x1,200	500 pcs/box
ANTICORIT VCI P 70	sheet	800252906	200x300	500 pcs/box
ANTICORIT VCI P 70	sheet	800234407	225x350	500 pcs/box
ANTICORIT VCI P 70	sheet	800252913	300x400	500 pcs/box
ANTICORIT VCI P 130 K	sheet	800313218	240x330	250 pcs/box
ANTICORIT VCI P 130 K	sheet	800401977	750x1,200	150 pcs/box
ANTICORIT VCI P 480	card board	800246806	780x1,180	50 pcs/box
ANTICORIT VCI P 950	card board	800181459	780x1,180	25 pcs/box

*ANTICORIT VCI paper are available in different dimensions and grammages on request.

Notes

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Note

The information contained in this brochure is based on the experience and expertise of FUCHS LUBRICANTS GERMANY GmbH in the development and manufacture of lubricants and represents the current state of the art. The performance of our products can be influenced by a series of factors, especially the specific use, the method of application, the operational environment, component pretreatment, possible external contamination, etc. For this reason, it is not possible to make universally valid statements about the function of our products.

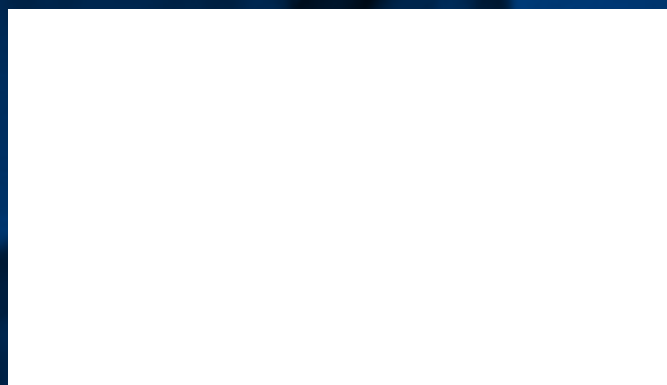
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Innovative lubricants need experienced application engineers

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

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