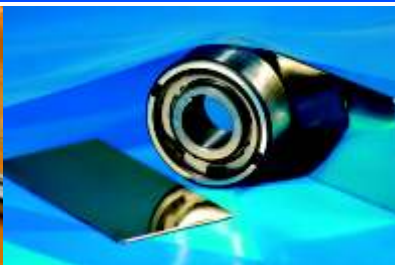


We protect your products during shipment & storage

BRANOpac GmbH Germany
Solutions with System : Corrosion Protection



Maintaining the value of good products



Branopac India PVT. LTD.
Subsidiary of BRANOpac GmbH Germany

Corrosion and its protection methods

BRANOpac: safe & efficient partner

Indian engineers craft wonderful metal products

Behind each good product, there is immense hard work, investment coupled with loads of perspiration.

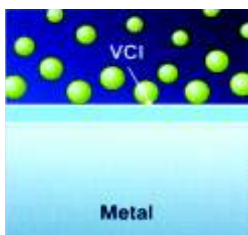
Inadequate protection often becomes cause of tremendous losses due to corrosion during shipment & storage

"Good Products Need Good Protection"

"We protect your products"

BRANOpac provide **Safe, Efficient & Cost Effective** Solutions

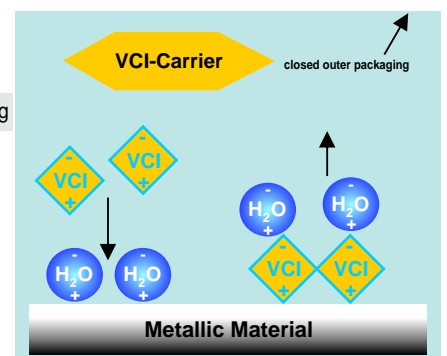
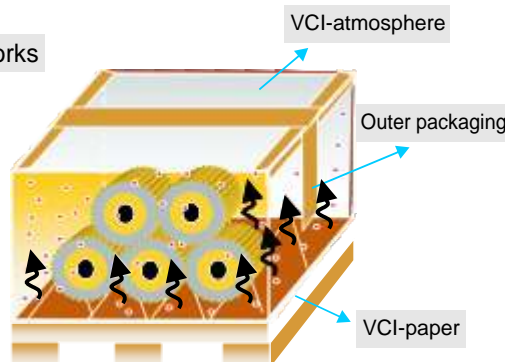
BRANOpac deals in all the three temporary corrosion protection methods.



1 The World of VCI

Volatile Corrosion inhibitors (VCI) are Volatile chemical substances which are adsorbed on the metal surface thus preventing corrosion. BRANOpac VCI formulations are considered most effective and the BEST in the world.

How VCI works



- Evaporation from substrate by sublimation
- Diffusion throughout the packaging until saturation
- building up a protection-atmosphere
- full protection is reached within 15 min
- outer packaging has the function to keep the inhibitors inside

VCI chemicals are specific for each metal. Please consult us for usage & storage guidelines.

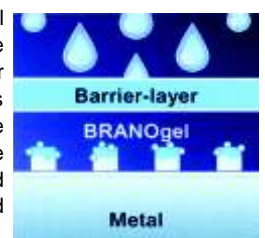
2 Oil Coating method :

Metals are coated with a film of oil or wax containing corrosion inhibitors. The purpose is to keep humidity away from the metal surface. The application can be carried out by dipping, spraying or with brush. While thick film oils normally need solvents for removal and attract dust, BRANOpac offers thin film oils which often do not require removal at all.



3 Aluminum Barrier Foil-method

The aluminum barrier foil packaging keeps the humidity away from further entry. Dessiccants absorb and bind humidity inside the packaging. The aluminum barrier foil needs to be vacuumised and sealed properly.



Six good reasons for better solutions

Why BRANOpac?



CUSTOMERS
AND
PRODUCTS



WORLDWIDE



ENVIRONMENT



MANUFACTURER



LABORATORY,
ANALYTICS AND
APPLICATIONS
TECHNOLOGY



1
QUALITY

1 Customers and products

Our customers and their products are the focus. We undertake scientific on site **CORROSION PROTECTION AUDIT** to recommend safe and efficient products. Thus we have established **DECADES OF TRUSTWORTHY ASSOCIATION** with reputed companies across the world. We also impart **FREE** on-site and in-house **TRAINING** by our German experts.

2 Worldwide

BRANOpac is represented on four continents and has a worldwide production and distribution network.

This results in a **GOOD NETWORK CO-ORDINATION** between the consignor as well as at the consignee end.

3 Environment

BRANOpac GmbH is environmentally conscious- it works according to **DIN EN ISO 14001 CERTIFIED** working processes and uses products made from natural, fully recyclable paper and cellulose. BRANOpac chemical formulations confirm to **TRGS-615 & REACH**

Registration Evaluation Authorisation and Restriction of Chemicals

4 Manufacturer

As a manufacturer, we are in charge of all development and production processes. Branopac has **OVER 50 YEARS OF MANUFACTURING EXPERIENCE**. This enables development of customized products to suit local requirements.

5 Laboratory, analytics and applications technology

BRANOpac division possesses a **STATE-OF-THE-ART ANALYTIC LABORATORY**. Indeed, the expertise and know-how of this department is available to you for individual research purposes and for providing application advice.

6 Quality

BRANOpac stands for high quality. It ensures the quality of its products drawn on optimized business processes certified in accordance with **DIN ISO 9001 TUV & DEKRA**



Corrosion Protection VCI Papers

BRANOcell: Product of future

BRANOpac corrosion protection papers act in accordance with the VCI principle (Volatile Corrosion Inhibitors) i.e. they release small amounts of volatile protective substances. A protective atmosphere is built up in packaging containing this paper, providing reliable protection against corrosion for metal components. BRANOpac papers work on contact and from a distance.



We have set high standards, particularly with our papers and cellulose products. BRANOrost has proven itself a million times over and is the best in the world.



BRANOrost

BRANOrost R : Recommended for Steel, chrome, pure tin, high-grade aluminum, cast iron.

BRANOrost M (nitrite-free): Same as BRANOrost R but compared with R with limited casting protection.

BRANOrost U: Recommended for Steel, cast iron (only on contact), chrome, copper, brass, zinc, bronze, high-grade aluminum.

Protection duration: Up to 3 years depending on the climatic conditions and how tightly sealed (leak-proof) the packaging is.

BRANOpac

Recommended for Copper, brass, bronze and nickel.

Protection duration: Up to 3 years depending on the climatic conditions and how tightly sealed (leak-proof) the packaging is.

Branopac paper works on contact and from a distance.



FERROGARD

Recommended for Steel, chrome, pure tin, high-grade aluminum, cast iron. Only on contact. Ferrogard is basic grade paper & recommended for simple demands.

FERROGARD M

Same as FERROGARD but free from nitrites.

Protection duration: 12 months for castings, 18 months for other recommended metals. depending on the climatic conditions and how tightly sealed (leak-proof) the packaging is.

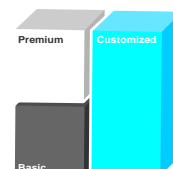


MULTIGUARD

Recommended for Multimetal protection Steel, cast iron (only on contact), zinc, copper, brass, bronze, chrome, pure tin, high-grade aluminum. Multiguard is basic grade paper & recommended for simple demands. For higher demands BRANOrost U is recommended.

Protection duration: 12 months for castings, 18 months for other recommended metals. depending on the climatic conditions and how tightly sealed (leak-proof) the packaging is.

- Other Grades : SILVERbrite Paper for Silver Tarnish Protection : BRANOkont: Contact corrosion protection paper.
Supply Forms : Available with different thickness, grammage, with PE lamination (water resistant coating) with fabric re-reinforcement, heat sealable, creped.
Supplies : Customised rolls, cut sheets, pouches, bags etc. : customer special prints
For further details : Specific Product Information, Product Specifications & Safety Data Sheets are available



Corrosion Protection Emitters

BRANOrost chips: wonder product for volume protection

BRANOrost chips are differently sized cellulose cut-outs or punch outs that have been impregnated with vapour-phase corrosion-protection substances. BRANOrost chips act in accordance with the VCI principle (Volatile Corrosion Inhibitors) i.e. they release small amounts of volatile protective substances. A protective atmosphere is built up in packaging or containers containing these fill chips, providing reliable protection against corrosion for metal components. BRANOrost chips have a reserve-supply system.

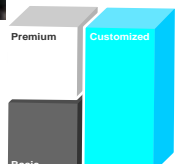


BRANOrost Chips are placed or hung in packaging or cavities with tightly sealed outer walls. The better the outer seal, the longer-lasting the protection. Depending on the size of the packaging, small-format chips such as cut-outs or punch outs can be used. Large-format chips are also available. The distance between the BRANOrost Chips and the metal will depend on the packaging volume and the amount of time needed for a protective atmosphere to build up. As a rule of thumb, the amount of time needed for a fully protective atmosphere to build up at a distance of 30 cm for steel and cast iron and at 12 cm for copper and its alloys is approximately 15 minutes and 24 hours respectively. The surfaces to be protected must be dry and free from corrosion-promoting residues such as finger sweat, aggressive detergent-based substances and others. Acids and strong alkaline can also affect the corrosion protection system. The protected materials should be kept away from direct contact with wood or acidic materials. It is also important to make sure that relative atmospheric humidity is kept low and that there is no atmospheric contamination (make sure that there is no wood in the packaging).



BRANOrost chips hung during machine packaging

Protection duration : 3 years maximum in tightly sealed packaging. Depending upon climatic conditions
BRANOrost R-Chip : Recommended for Steel, cast iron, chrome, block tin, high-grade aluminium.
BRANOrost U-Chip : Recommended for Steel, copper and its alloys, brass, bronze, high-grade aluminium, block tin, chrome.
Supply Forms : In desired sizes, shapes, cutouts & punchouts from few mm to several meters.



Corrosion Protection VCI Films

BRANOfol: protection with transparency

BRANOpac corrosion protection films act in accordance with the VCI principle (Volatile Corrosion Inhibitors) i.e. they release small amounts of volatile protective substances. A protective atmosphere is built up in packaging containing this paper, providing reliable protection against corrosion for metal components. BRANOpac films work on contact and from a distance.



BRANOfol M3

BRANOfol M 1 is a transparent, bluish special polyethylene film; it is nitrite-free and features active VCI corrosion protection on both sides. It is water resistant, weldable and suitable for use in automated packaging processes and for bag manufacturing.

Recommended for Steel, cast iron (limited, only on contact); reliable corrosion protection for galvanized steel, nickel, aluminium, chrome and zinc.

Available in 60 µm, 80 µm, 100 µm, 150 µm & 200 µm



GP3 BRANOfol R2(Skinfilm with corrosion protection)

BRANOfol Skinfilms are polyethylene films with lower thickness (PE-LD) or Surlyn; they are coated on one side with an adhesive agent and VCI vapour-phase corrosion-protection inhibitors. Skin-film packaged components are provided with reliable corrosion protection on contact; protection is also provided from a distance for drill holes and other hard-to-access places. Recommended for Steel, iron, chrome and high-grade aluminium.



GP 4 BRANOfol LPM 6.18

BRANOfol LPM 6.18 is a nitrite- and amine free special polyethylene air cushion film, which, as well as offering air-cushioned protection, also provides active one-sided corrosion protection.

BRANOfol LPM 6.18 is waterproof, weldable (heat-sealable) and suitable for automated packaging for bag manufacturing.

Recommended for Steel, cast iron (limited, only on contact); reliable corrosion protection for nickel, aluminium, chrome, copper and its alloys.

The thickness of the VCI laminated film is 80 µm, bubble diameter is approx. 10 mm.



BRANOfol M5 (VCI stretch film)

BRANOfol M5 is a bluish, transparent stretch film with active VCI corrosion protection that is especially suited for packaging steel coils. BRANOfol M5 is a water resistant polyethylene (LLDPE) film.

Thickness : 30 µm. or 50 µm.

Range of Protection

BRANOfol M5 protects steel, cast iron, nickel, aluminium, chromium, zinc and copper and its alloys.

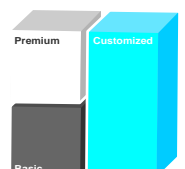
Protection duration : Up to 12 months depending on the climatic conditions and how tightly sealed (leak-proof) the packaging is.

Other Grades : Extra strong (XS), re-inforced film and desired colours.

Supply Forms : Films are available with different mechanical properties like different thickness, grammage.

Supplies : Customised rolls, cut sheets, pouches, bags & shrouds etc. : customer special prints

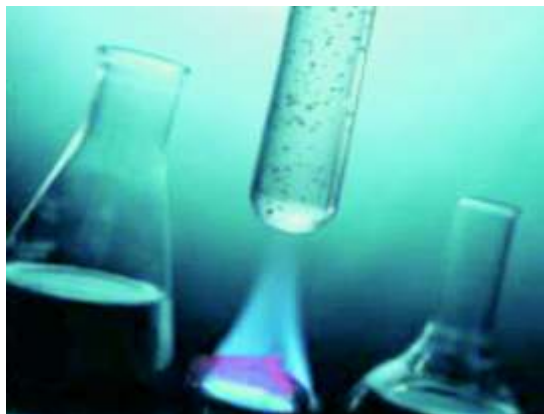
For further details : Specific Product Information, Product Specifications & Safety Data Sheets are available



Corrosion Protection Fluids

BRANOfluid

BRANOfluids form very thin layer on the surface and thus often do not require removal at all. BRANOfluids are economical because of high yield per litre.



BRANOtect Export

Thin-bodied (10 µm.) corrosion preventive made from mineral oil raffinates, petroleum distillates and anticorrosive additives. It contains neither silicone nor wool fat.

BRANOtect Export builds metal surfaces a highly effective temporary protective film against corrosion with good self-sealing tendency when breaking.

Range of Protection : Suitable for all metals

Duration of Protection : More than 5 years in right packaging



BRANOtect (AIII)

Thin-bodied (2 µm.) corrosion preventive made from mineral oil raffinates, petroleum distillates and anticorrosive additives. It contains neither silicone nor wool fat. This product stands out due to its outstanding flow properties, good grease effect, and 100% water displacement.

It crawls along the upper metal surfaces and displaces the adherent moisture, finger prints and residues from previous processes.

Range of Protection : Suitable for all metals

Duration of Protection : 12 - 24 months in right packaging



BRANOral - VCI-anticorrosion oil

Mineral oil-based anticorrosion oil without solvent, wax, wool fat, silicone or inorganic, ash-building additives.

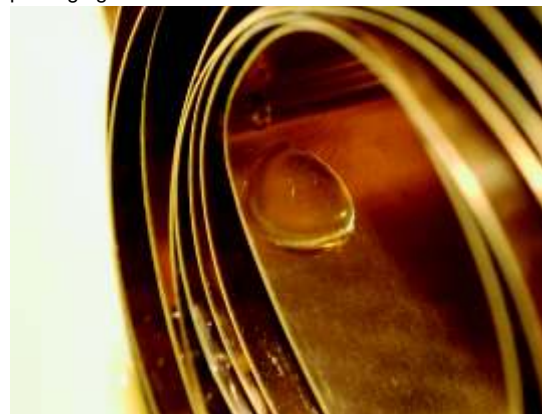
BRANOral protects in two different ways :

-As oil film

-Through VCI principle

Application : For hollow-space protection of gears, pumps, engines, cylinders, pipes, tanks.

Range of Protection : Especially made for the protection of Iron.



BRANOral: Water miscible

BRANOral C10-Clear, alcoholic active ingredient solution for diluted use in treatment fluids or swill baths.

Branoral C10 produces an extremely thin, practically not distinguishable, passivation coating on non-ferrous heavy metals so that the resistance to tarnish is considerably improved.

Range of Protection : Copper, bronze & brass.

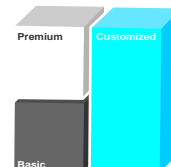
BRANOral B60 watery active substance for use as additive for water based cleaning liquids. It is nitrite-free and contains no silicone or hydrazine.

Range of Protection : Iron steel & Cast Iron.

Other Grades : Special liquids are developed based on specific applications.

Supply Forms : 5 Litres, 20 Litres, 100 Litres, 210 Litres barrels.

For further details : Specific Product Information, Product Specifications & Safety Data Sheets are available



Corrosion Protection by climatic packaging

BRANOvac

Aluminium Barrier foil & desiccant moisture absorber combination works on principle of climatic packaging. Barrier foil need to be vaccumised & must be strong enough to be puncture resistant. Ideal safe packaging is combination of aluminium barrier foil, with BRANOrost chips for long term protection.



VACUPAC

Vacupac is an aluminium-composite foil for more exacting demands. Excellent breaking and bursting strength. Vacupac is moisture and grease-proof, extremely durable, flexible, wear resistant and heat-sealable.

Application : Packaging of machines, electronic control systems tools components etc.

Basic weight : 128 gsm.

Water vapour transmission rate : less than 0.02 g/m².C



ALFOPAC

Alfopac is an aluminium-composite foil for normal demands. Vacupac is moisture and grease-proof, extremely durable, flexible, wear resistant and heat-sealable.

Application : Packaging of machines, electronic control systems tools components etc.

Basic weight : 120 gsm.

Water vapour transmission rate : less than 0.05 g/m².C



VACUMETIC

Vacumetic is an aluminium-composite foil for highest demands. Specially developed for odd-shaped angular metal objects.

Excellent breaking and bursting strength. Vacuumetic is moisture and grease-proof, extremely durable, flexible, wear resistant and heat-sealable.

Application : Packaging of machines, electronic control systems tools components etc.

Basic weight : 119 gsm.

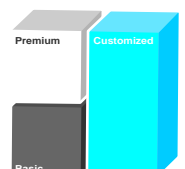
Water vapour transmission rate : less than 0.035 g/m².C



BRANOgel

BRANOgel is activated clay. It is corrosion neutral, granulated and packaged in bags made out of dust and tear-proof paper or fleece. The drying agents absorb the vast majority of moisture from surrounding air. For effective protection to be achieved, the packaging of the goods must be moisture resistant. Each package must be heat sealed and made moisture-proof.

Other Grades : VCI Film laminated aluminium foil, cross laminated barrier foil, extra strong barrier foil.
Supplies : Customised rolls, cut sheets, pouches, bags & shrouds etc.
For further details : Specific Product Information, Product Specifications & Safety Data Sheets are available



Applications

Small Metal Parts to big machines & coils

We protect
automotive ckd/skd
automotive parts
precision parts
precision tools
Forgings
Castings
Sheet Metal Parts
Machineries
Metal Coils
Metal Wires
Metal Tubes
Power Gen Eqm'ts
Engg Assemblies
Electr Assemblies



Decades of Trustworthy Association

In-house & On-site Technical training by
German Experts

Honeywell

DEMAG
Cranes & Components



Danfoss



CLAAS

valeo added



Audi

DELPHI

VOLVO



JOHN DEERE



BOSCH

ABB



brembo



FIAT



Atlas Copco

HONDA
The Power of Dreams

Buderus



RECARO

MAHLE



TOYOTA



CHRYSLER



RENAULT

BOBST



WARRANTY TERMS : BRANOpac warranties quality of its products supplied limited to its full value or for full replacement.
It bears no liabilities for consequential damages arising due to improper usage & due to other conditions which are beyond our control and/or our purview.

About BRANOpac



Venture initiated in 1875 by Buscher family diversified into various fields across the world. Under the dynamic leadership of Chairman Mr. Thomas Buscher, BRANOholding, owns three business manufacturing units
BRANOpac,
BRANOfilter (vacuum filter bags) having plants in Germany, India & China & office's & partners across the world.
Wabenfabrik (light weight material for automotives).



Mr. Joerg Schulte, Director BRANOpac GmbH, widened market base internationally and established four business units.
(a) BRANOguard-corrosion protection
(b) BRANOfood-food papers and boards
(c) BRANotech-technical paper and boards
(d) BRANOscience-laboratory analytical services.



BRANOpac India initiated in 2002, has steadily grown to establish manufacturing plant at Sonipat (40km North of Delhi on National Highway-1).
The organisation has steadily and swiftly established all India customer network and also exports to other asian countries.



At your service across the world



Branopac India PVT. LTD.

Subsidiary of Branopac GmbH Germany

Solutions with System : Corrosion Protection

Works :

71, Liwaspur, Bahalgarh Chowk,
Sonepat-131021 (Haryana) India.
Ph. : 0130-2380380, 2380381, 3207050

E-mail : india@branopac.com

Website : www.branopac.com

