COATED CORRUGATED BOARD for Undreamt-Of Advantages



better packaging...

SINCE 1933

... with the **KOLB** Group and **KOLB** CoatedProducts. It's a claim that is also a promise. A promise that we'll provide an impressive variety of packaging solutions which are new every day.

It was back in 1933 that Hans Kolb first founded what has now become one of the most successful family-owned companies in the corrugated-board business. Corrugated board forms the basis of the packaging solutions from **KOLB**. Simply explained we are architects for your products "home". Your customized packaging solution will be created by our teams of **KOLB Design** and **KNAUER Design**, the R&D division of **KOLB** and **KNAUER**.

The convincing criteria for reaching your packaging goals is a modern production environment and, above all, the know-how of more than 1.100 committed employees.



Index

4	The Company
-	The company

- 7 CORSTAT[™]/CORTRONIC[®]
- 25 CORRUST®
- 31 SKINBOARD®
 - **COR**RUST **SKIN**BOARD[®]
- **36** Special coatings
- 39 KOLB Logistics & Service

νιςιον

"Together with our customers we will continue to respond to all the requirements of the market and accompany them with constant innovations.."

Alwin J. Kolb, Angela Kolb and Dr.-Ing. Bernhard Ruffing





Our passion is both developing and producing corrugated board packaging solutions. Our claim "besser verpacken!" is more than just saying KOLB packaging solutions are better. Instead KOLB offers a wide range of developing and logistical service. As a family-owned company based in one of the most beautiful parts of Southern Germany, the Allgaeu, we have been grown together with our customers over the past eight decades.

The Company

As early as in 1933 the basis for our success was established. Since then the Hans Kolb Group has developed step by step to an internationally active company. We develop and produce packages, packaging materials and special products of corrugated cardboard.Our main duty is to face the market's new challenges quickly and flexibly.

Packaging needs to conform to various requirements. Here KOLB packaging development continues along a tailormade path. According our motto "better packaging" the **KOLB Design** and **KNAUER Design** teams with its long experience utilizes the most modern creativity systems.

Numerous different solutions can be tested and created, which always gives you the advantage. Highest flexibility is our demand and at the same time our promise when it comes to the development of the perfect packaging solution. As producer of environmentally friendly recyclable products, HANS KOLB Wellpappe commits itself to a binding environmental policy to a great extent.

Our company has always given significant value to the gentle handling of raw materials as well as the application of ecological energy in modern production procedures. Through our determination to protect the environment – binding for the whole of the company as well as for each individual employee – we adopted an exemplary position in the field of ecological protection.

In this context we produce, for example, our own energy in terms of electricity and steam at our papermill HANS KOLB Papier.

KOLB GROUP

Sustainability Through Tradition

LONG BEFORE THE TOPIC OF SUSTAINABILITY WAS DISCUSSED IN DAILY MATTERS, IT WAS EXACTLY THIS COURSE OF ACTION WHICH WAS ROOTED IN OUR COMPANY DNA.

Among other things, we justify this with FSCcertified products that we manufacture at all KOLB and KNAUER sites. Also HANS KOLB Papier, the paper mill of the KOLB Group, also follows this self-image which has been by independent institutes.

Furthermore, we have always had a closed raw material cycle, especially in our own base paper production. After all, edge trimmings and diecutting waste are directly recycled back into high-quality recycling liner and fluting, for which we also take the waste paper from regional suppliers.

But that's not all: our corporate culture with flat hierarchies and extremely short decision-making paths is also constantly moving us forward - without, however, disregarding what we have achieved and the experience that goes with it. The above-average length of service of our employees is impressive proof of this. We are also aware of our social responsibility. As a sponsor of the Kinderbrücke Allgäu e. V., we have supported this regional organisation since its inception over 10 years ago. The board of trustees, which includes shareholders of our company, makes the decisions to help sick children and children in need. This is done unbureaucratically, with the necessary common sense or simply with the heart in the right place.

The majority of our production and administration sites are located in the Allgäu region. But where agriculture used to be the outstanding economic mainstay, today a balanced and at the same time specialised industry structure characterises the business location Allgäu. This also applies to the locations in Haiterbach and Dettingen / Erms.

Today we are proud of many long-standing business business relationships, which justify joint growth with our growth with our customers. We will continue to pursue this development pursue this development. After all, that is precisely what we mean by sustainability.



... When There Is A Spark!

Ò

IEC and EN Standards

Standards play an important part in reducing uncertainties in the evaluation, selection and use of ESD protection programs and products. Today in Europe, the operating standard is IEC 61340-5-1.

CORTRONIC[®] meets or exceeds IEC 61340-5 requirements pertaining to packaging of ESDS during transport and shipping.

Electrostatic Protected Area

All containers and working appliances in the ESD protected area must be of diverting nature in order to make a controlled potential equalization respectively the grounding possible.



Anti-oxidation Protection

All ESD protective packagings can additionally be equipped with an active, temporary and volatile corrosion inhibitor (VCI).

Electrostatic Discharge ESD

To a greater or lesser extent all contact between objects, every separation of one itemfrom another, each sliding of one thing on another, causes a disturbance of electrical charge. When charge disturbances take place faster than charge redistribution, static charge accumulates. ESD occurs where charges of different electrostatic potentials meet. The flow of electrons is usually sudden and releases energy that can damage electrostatic sensitive devices (ESDS).

The Answer

To protect ESDS from the unwanted effects of ESD, two key measures must be taken and applied at all times:

- ESDS must be handled exclusively in an ESD Protected Area (EPA) where electrostatic potential differences are minimised.
- ESDS should be transported from one EPA to another preferably only in shielded packages.

CORTRONIC[®] is an ideally suited packaging for ESDS and because of its static dissipative skin and buried conductive core, it is an ESD shielding material suitable for use in ESD protected areas.



Permanent conductive – no time limit

CORSTAT^m and **COR**TRONIC[®] for safe use inside and outside of the EPA

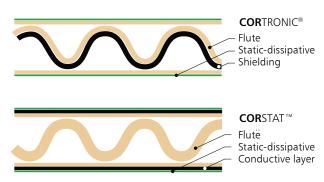
 $\begin{array}{ll} \textbf{COR} TRONIC^{\circledast} \ \approx \ 10^{7\text{--8}} \ \text{diverting layer Ohm} \\ & < \ 10^2 \ \ \text{shielding layer Ohm} \end{array}$



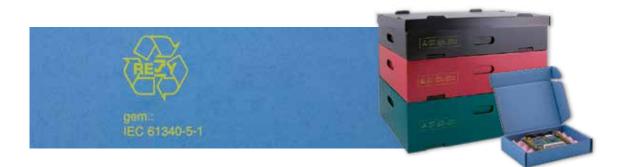
Applications

CP - COATED PRODUCTS protect your electronic components. The ESD containers offer special protective layers that balance electrostatic voltages and shield fields.

Thus **COR**STATTM and **COR**TRONIC[®] offer the full range to protect your electronics from ESD hazards, from. < 10^2 to 10^{11} Ohm. For your safety during packaging, transport, storage and shipping.



Technical Facts	COR STAT™	COR TRONIC [®]
Electrical		
Surface resistance		
Core layer		< 10 ²
(1- or 2-layer)		
No heavy metall Surface resistance of integrated	< 104	
mid layer	< 10	
Surface resistance outer layer	10 ⁵⁻⁶	107-8
Controlled potential equalization	yes	yes
Tribocharging	none	none
Surface colours	Black	Blue as a standard
Energy Bag Test	< 20 nJ	< 10 nJ
ANSI / ESD STM 11-31		
IEC 61340-4-8		
Chemical		
Corrosion	none	none
Galvanic potetial	none	none
Recyclability	Resy 0062	Resy 0062
Mechanical		
Resistance to abrasion	yes	yes
(varnished surface)		
Printability	limited	limited
Moisture	no limitation	no limitation
	of the electrical features	of the
	electrical features	electrical features
Specifications		
Equivalent of	ANSI/ESD S541	ANSI/ESD S541
Equivalent of	DIN EN 61340-5-3	DIN EN 61340-5-3
Protected by	Patent given	Patent given
No subject to RoHS-guidelines (2002	2/95/EG and 2002/96/EG)	
Weight example		
L 600 W 400 H 120 mm	0,58 kg	0,58 kg









The Environment

CORTRONIC[®] packaging can withstand repeated use without loss of electrical properties. In the end, it can be recycled in the waste paper stream.





User information for CORSTAT™/CORTRONIC®/DISSIPATIV

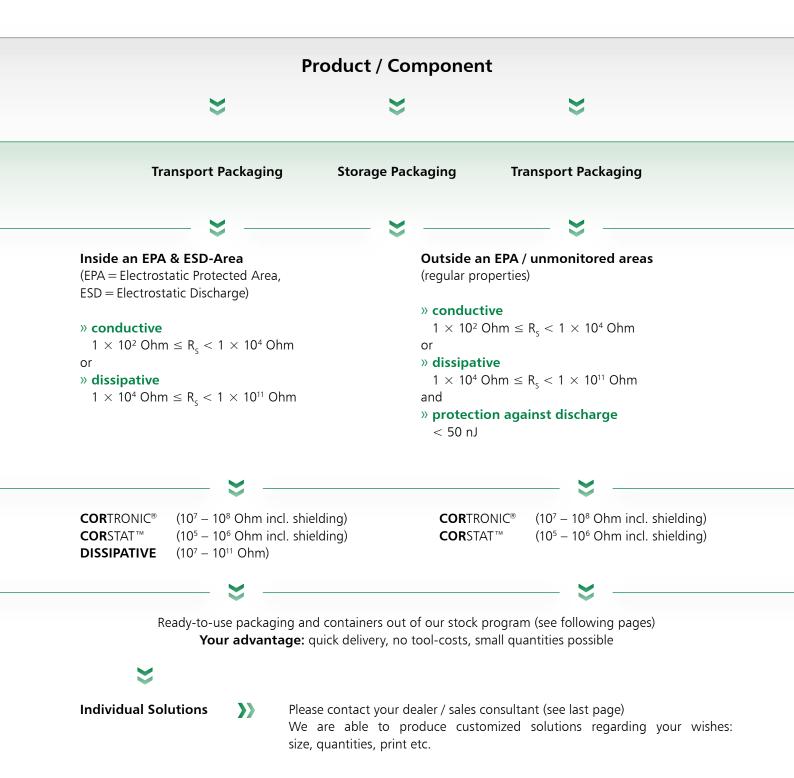
Logistical requirements

Location and transport Requirement due to IEC 61340-5-3

Type of coating

Procurement





Containers For Shipment

Standard color: Blue



PCB Transit Boxes with printed warning

 ${\bf COR}{\sf TRONIC}^{\circledast}$ Assembled boxes lined with conductive profiled soft foam and conductive pin-insertion foam

Ref	ef Item-No.		r dimensio	ons, mm
01-TVS	10003499-0001	40	40	15
02-TVS	10003515-0001	60	60	24

CORTRONIC[®] Flat packed boxes, empty

Ref	Item-No.	Inner	dimensio	ns, mm
05-TVS	10002882-0001	100	55	25
10-TVS	10002951-0001	183	127	38
15-TVS	10002952-0001	178	127	64
20-TVS	10002947-0001	190	135	40
30-TVS	10002953-0001	250	191	38
40-TVS	10002948-0001	250	191	64
45-TVS	10002954-0001	250	191	110
50-TVS	10002949-0001	267	216	64
55-TVS	10004138-0001	300	300	100
56-TVS	10004139-0001	340	300	100
57-TVS	10002955-0001	380	280	60
58-TVS	10002957-0001	380	250	120
60-TVS	10002950-0001	420	220	40
65-TVS	10002956-0001	420	220	65
70-TVS	10002946-0001	480	360	64

Inserts for PCB Transit Boxes

Profiled Foam Pink

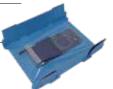
Height 20 mm, dissipative pink, dissipative function lasts up to 6 months

Ref	Item-No.
05-NS-AS	12000062
10-15-NS-AS	12000064
20-NS-AS	12000066
30-45-NS-AS	12000068
50-NS-AS	12000070
55-NS-AS	12000072
56-NS-AS	12000074
57-NS-AS	12000076
58-NS-AS	12000078
60-65-NS-AS	12000080
70-NS-AS	12000082

Profiled Foam Black

Height 20 mm, elektrisch leitfähig, conductive funtion: max. 5 years

Ref	Item-No.
05-NS-EL	12000063
10-15-NS-EL	12000065
20-NS-EL	12000067
30-45-NS-EL	12000069
50-NS-EL	12000071
55-NS-EL	12000073
56-NS-EL	12000075
57-NS-EL	12000077
58-NS-EL	12000079
60-65-NS-EL	12000081
70-NS-EL	12000083



Flatpac

dissipative, incl. fixation film, dissipative function of foil: max. 6 months

Ref	Item-No.	
10-DFP	12000120	
15-DFP	12000119	
20-DFP	12000121	
30-DFP	12000122	
40-DFP	12000123	
45-DFP	12000124	
50-DFP	12000125	
55-DFP	12000126	
57-DFP	12000129	





Ref	Item-No.	Inner	Inner dimensions, mm		
20-KC	12000130	125	107	25	
30-KC	12000131	160	127	34	
40-KC	12000132	235	175	45	
50-KC	12000133	282	228	70	

* Dissipative function of the film: max. 6 months

Foampac E-Prom

with printed warning

CORTRONIC® Transit box with conductive foam*: PE - PE-foam (6 mm) PE-N - PE-foam (6 mm) + profiled foam (10 mm) N - Profiled foam (10 mm) fully covered also without foam available (OS)

Ref	Item-No.	Inner	dimensi	ons, mm
05-TEP-OS	10002922-0001	95	30	15
05-TEP-PE	10003249-0001			
05-TEP-PE+N	10003250-0001			
05-TEP-N	10003252-0001	-		
10-TEP-OS	10002842-0001	100	60	15
10-TEP-PE	10003257-0001			
10-TEP-PE+N	10003260-0001			
10-TEP-N	10003264-0001			
15-TEP-OS	10002894-0001	100	60	30
15-TEP-PE	10003265-0001			
15-TEP-PE+N	10003268-0001			
15-TEP-N	10003277-0001			
20-TEP-OS	10002996-0001	120	100	15
20-TEP-PE	10003281-0001			
20-TEP-PE+N	10003282-0001	-		
20-TEP-N	10003283-0001			
30-TEP-OS	10002997-0001	155	70	25
30-TEP-PE	10003284-0001			
30-TEP-PE+N	10003285-0001			
30-TEP-N	10003286-0001			

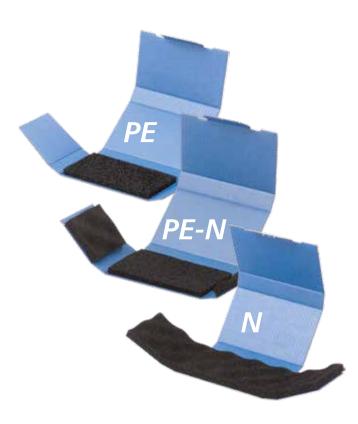
Foampac

with printed warning

CORTRONIC[®] Transit box with dissipative profiled foam* (AS / 20 mm) or conductive profiled foam* (EL / 20 mm), also available without foam (OS)

Ref	Item-No.	Inner dimensions, m		ns, mm
05-TCP-OS	10002993-0001	150	115	40
05-TCP-AS	10003144-0001			
05-TCP-EL	10003157-0001	-		
10-TCP-OS	10002994-0001	200	140	50
10-TCP-AS	10003190-0001			
10-TCP-EL	10003194-0001			
20-TCP-OS	10002995-0001	280	140	100
20-TCP-AS	10003196-0001			
20-TCP-EL	10003211-0001			

* Dissipative function of pink profiled foam: max. 6 months





Container For Production And Storage Outside of container is treated with water-/scratch-resistant coating

Standard color: Black

Reel Box CORSTAT[™]**and COR**TEC

Outside of container is treated with water-/scratch-resistant coating

Ref	Item-No. Inner dimensions, mm Outer dimens		Inner dimensions, mm			sions, mm	Reels Ø mm	
10-CRB	10004713	380	176	100	398	193	104	180, max. 16 Reel
30-CRB	10005113	355	286	220	373	204	224	380, max. 5 Reel

Ref	Item-No.	Inner dimensions, mm			Reels Ø mm
10-CRM	10005114	330	319	220	380, max. 8 Reel



IC Bar Magazine CORSTATTM

for IC bars, stackable, 5 slots

Ref	Item-No.	Inner dimensions, mm	Outer dimensions, mm		
10-ICM-B+E	10004336-0001	336 586 35	399 599 39		

Tube Box CORSTAT[™] and CORTEC

for IC bars, with printed warning

Ref	Item-No.	Inner	dimens	sions, mm	Oute	r dime	ensions, mm
05-CTB-B+D	10004337-0001	600	95	45	610	113	51
10-CTB-B+D	10004335-0001	590	95	95	600	113	101





Storage Bo	ox, open
COR STAT [™]	and CORTEC

Ref	Item-No.	Inner	Inner dimensions, mm			Outer dimensions, mm		
05-CLBO	10002646-0001	180	62	65	202	70	70	
10-CLBO	10002644-0001	285	150	110	305	159	115	
15-CLBO	10002879-0001	292	109	122	313	116	127	
20-CLBO	10002657-0001	580	65	65	600	73	66	
30-CLBO	10002648-0001	592	109	122	611	117	127	
40-CLBO	10002649-0001	592	153	70	611	161	75	
45-CLBO	10002659-0001	590	200	180	609	209	185	
50-CLBO	10002645-0001	615	100	130	634	108	135	

Accessories For Production, Storage And Shipment



for 48 / 50-TSC, CSC, MB and TAB **dissipative**, black with 2 bevelled corners

Ref	Item-No.	Dime	ensions, mm
05-DZW	10002650-0001	357	246
10-DZW	10002656-0001	550	350



Heel Strap Dispenser

dissipativ, blau, inkl. 100 Fersenbänder

Тур	Artikel-Nr.	Innenmaße mn					
100-TFS	12000118	304	144	17			

Adhesive Tape Black



needed for 30, 40, 45, 50-TSC and TAB

Ref	Item-No.	Length, m	Width, mm
10-KB	12000139	66	50

Label Holder

dissipative, adhesive, transparent, further sizes upon request

Ref	Item-No.	Dimensions, mm				
05-LT	12000134	140	100			
10-LT	12000135	215	105			

Container For Production, Storage And Shipment

In-plant handler CORTRONIC®

with printed warnung, black

The removal of longitudinal bars offers the possibility to vary the compartment size: Bars dissipative, for 30, 40, 45 and 50-TSC adhesive tape is needed (sold separately)

Ref	ltem-No.	Inner L	dimen B	sions [*] H	No. of comp.	Com L	p size* B	Н	No. of short bars	No. of long bars	Outer L	dimensio B	ns incl. lid* H
10-TSC	10003026-0001	270	169	195	12	130	24	195	1	5	297	181	204
10-TSCD	10003017-0001	287	177	50	6	265	24	195		5			
10-DSC-K	10002788-0001	392	169	(short bar)									
10-DSC-L	10002794-0001	392	276	(long	bar)								
15-TSC	10004136-0001	372	388	84	60	109	18	84	19	4	400	400	100
15-TSCD	10004137-0001	390	396	35	40	165	18	84	19	3			
15-DSC-K	10002795-0001	84	372	(shor	t bar)								
15-DSC-L	10002797-0001	84	388	(long	bar)								
20-TSC	10004140-0001	386	386	176	30	110	30	175	4	9	415	405	190
20-30-TSCD	10003016-0001	401	401	60	20	168	30	175	3	9			
					10	340	30	175	2	9			
20-DSC-K	10002786-0001	358	383	(shor	t bar)					÷			·
20-DSC-L	10002800-0001	266	385	(long	bar)								
30-TSC	10002928-0001	386	386	358	18	168	35	350	8	3	415	405	365
20-30-TSCD	10003016-0001	401	401	60	9	340	35	350	8	2			
30-DSC-K	10002784-0001	624	385	(short bar)									
30-DSC-L	10002801-0001	718	383	(long	bar)				_				
40-TSC	10003019-0001	424	272	281	22	178	18	280	3	10	450	290	290
40-TSCD	10003025-0001	438	286	60	11	365	18	280	2	10			
40-DSC-K	10002802-0001	280	269	(shor	t bar)								
40-DSC-L	10002792-0001	523	421	(long	bar)								
45-TSC	10003024-0001	493	390	166	20	178	45	166	9	3	510	410	175
45-TSCD	10003015-0001	505	406	50	10	360	45	166	9	2			
45-DSC-K	10002780-0001	333	390	(shor	t bar)								
45-DSC-L	10002785-0001	333	493	(long	bar)	- <u>r</u>			T	1	1	-1	1
48-TSC	10003027-0001	562	355	150	44	123	24	150	5	10	595	380	160
48-50-TSCD	10003018-0001	580	375	60	33	165	24	150	4	10			
					22	250	24	150	3	10			
					11	515	24	150	2	10			
48-DSC-K	10002778-0001	150	352	(shor						-			
48-DSC-L	10002799-0001	150	560	(long									
50-TSC	10002934-0001	562	355	329	44	123	24	325	5	10	595	380	335
48-50-TSCD	10003018-0001	580	375	60	33	165	24	325	4	10			
					22	250	24	325	3	10			
					11	515	24	325	2	10			
50-DSC-K	10002793-0001	660	352		t bar)								
50-DSC-L	10002787-0001	508	560	l (long	bar)								

* Dimensions and sizes in mm



Tray CORSTAT™

Tray stackable, either with oder without foam OS = without foam oder AS = dissipative oder EL = conductive

Ref	ltem-No.	Inner	dimensi	ons, mm	Outer	dimens	ions, mm
05-CTR-OS	10003753-0001	297	230	28	351	246	31
05-CTR-AS	10003251-0001						
05-CTR-EL	10003253-0001						
06-CTR-OS	10002580-0001	297	230	55	351	246	60
06-CTR-AS	10003254-0001						
06-CTR-EL	10003258-0001						
07-CTR-OS	10002579-0001	305	243	40	358	259	43
07-CTR-AS	10003261-0001						
07-CTR-EL	10003263-0001						
20-CTR-OS	10002779-0001	499	330	28	550	346	31
20-CTR-AS	10003266-0001						
20-CTR-EL	10003267-0001						
25-CTR-OS	10002155-0001	499	330	40	550	346	43
25-CTR-AS	10002184-0001						
25-CTR-EL	10002185-0001						
30-CTR-OS	10002774-0001	499	330	70	550	346	73
30-CTR-AS	10003269-0001						
30-CTR-EL	10003270-0001					H	HHH.



EE-Tray with CORTEC assembled plastic reinforcement for stacking lugs										
Ref	Item-No.									
20-CTR-EE-OS	10003271-0001	496	327	28	550	354	35			
20-CTR-EE-AS	10003272-0001									
20-CTR-EE-EL	10003273-0001									
25-CTR-EE-OS	10003516-0001	496	327	40	550	354	45			
25-CTR-EE-AS	10003518-0001									
25-CTR-EE-EL	10003523-0001									
30-CTR-EE-OS	10003274-0001	496	327	70	550	354	75			
30-CTR-EE-AS	10003276-0001									
30-CTR-EE-EL	10003280-0001									

CTR Partition Inserts (solid board) CORSTAT[™]

Ref	Item-No.	Dimensions mm	No. of slots	Grid mm	No. of bars max.	Cell dimensi- on min. mm	No. of cells max.
20-CTR-K	12000055	328 28	14	20	21	– 20 x 20 x 28	330
20-CTR-L	12000056	497 28	21	20	14	- 20 x 20 x 28	220

Container For Production, Storage And Shipment Outside of container is treated with water-/scratch-resistant coating

Standard color: Black

Multibox CORTRONIC[®] and **COR**TEC

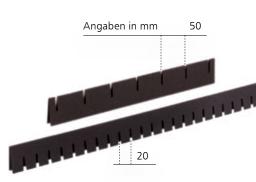


Ref	Item-No.	Inner dimensions, mm			Item-No. Inner dimensions, mm Oute			Outer	dimens	ions, mm
10-MB	10003014-0001	565	365	109	591	391	114			
20-MB	10002932-0001	565	365	209	591	391	214			

Multibox Lid CORTRONIC[®] and **COR**TEC



Ref	Item-No.	Inner dimensions, mm		Outer dimensions, m			
10-20-MBD	10002868-0001	593	393	50	603	397	53



Multibox Partition Inserts

for 10-20-MB, dissipative

Ref	Item-No.	Dim mm	ensions	No. of slots	Grid mm	No. of bars max.	Cell dimen- sions min. mm	No. of cells max.		
10-МВ-К	10002783-0001	352	100	7	50	22	50 x 20 x 100	138		
10-MB-L	10002782-0001	552	100	22	20	7	50 x 20 x 100	001		
20-МВ-К	10002798-0001	352	200	7	50	22	50 x 20 x 200	138		
20-MB-L	10002781-0001	552	200	22	20	7	JU X 20 X 200	001		
For individual co	For individual compartment layout, dividers are sold separately.									



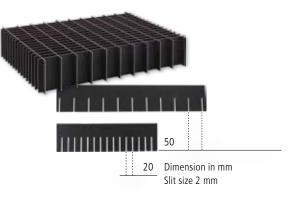
Customer-Store-Container in a colorful variety CORTRONIC[®] and **COR**TEC , can be used with and without lid

(without lid) (without lid) 03-CSC-BLACK 10003464-0001 362 251 60 389 278 67 03-CSC-RED 10003472-0001 67 03-CSC-BLUE 10003345-0001 362 251 100 389 278 107 05-CSC-BLACK 10003347-0001 362 251 100 389 278 107 05-CSC-BLACK 10003342-0001 <t< th=""><th>Ref</th><th>Item-No.</th><th></th><th></th><th>ions, mm</th><th colspan="2">Inner dimensions, mm without stacking lug</th></t<>	Ref	Item-No.			ions, mm	Inner dimensions, mm without stacking lug		
03-CSC-RED 10003472-0001 Image: Constraint of the sector			vvicine		king lag	1		king lug
03-CSC-GREEN 10003470-0001 Image: Constraint of the sector of the secto	03-CSC-BLACK	10003464-0001	362	251	60	389	278	67
03-CSC-BLUE 10003465-0001 362 251 100 389 278 107 05-CSC-RED 10003347-0001 362 251 100 389 278 107 05-CSC-RED 10003346-0001 362 251 139 389 278 146 05-CSC-BLUE 10003350-0001 362 251 139 389 278 146 10-CSC-RED 10003356-0001 362 251 139 389 278 146 10-CSC-RED 10003354-0001 362 251 220 389 278 227 15-CSC-RED 10003343-0001 362 251 200 389 278 207 15-CSC-BLACK 10003436-0001 51 362 60 578 389 67 17-CSC-BLACK 10003360-0001 51 362 100 578 389 107 19-CSC-RED 10003432-0001 51 362 100 578 389 146	03-CSC-RED	10003472-0001						
OS-CSC-BLACK 10003341-0001 362 251 100 389 278 107 OS-CSC-RED 10003347-0001	03-CSC-GREEN	10003470-0001						
05-CSC-RED 10003347-0001 I I I 05-CSC-GREEN 10003346-0001 362 251 139 389 278 146 10-CSC-BLACK 10003350-0001 362 251 139 389 278 146 10-CSC-RED 10003351-0001 I	03-CSC-BLUE	10003465-0001						
OS-CSC-GREEN 10003346-0001 Image: Constraint of the constraint	05-CSC-BLACK	10003341-0001	362	251	100	389	278	107
05-CSC-BLUE 10003342-0001 362 251 139 389 278 146 10-CSC-BLACK 10003356-0001 10-CSC-GREEN 10003354-0001 10-CSC-BLUE 10003351-0001 15-CSC-BLACK 10003437-0001 362 251 220 389 278 227 15-CSC-BLACK 10003437-0001 15-CSC-BLACK 10003434-0001 16-CSC-BLACK 10003432-0001 551 362 60 578 389 67 17-CSC-BLOE 10003463-0001 19-CSC-BLACK 10003453-0001 551 362 100 578 389 146 20-CSC-BLACK 10003532-0	05-CSC-RED	10003347-0001						
10-CSC-BLACK 10003350-0001 362 251 139 389 278 146 10-CSC-RED 10003356-0001	05-CSC-GREEN	10003346-0001						
10-CSC-RED 10003356-0001 Image: Marrier of the state	05-CSC-BLUE	10003342-0001						
10-CSC-GREEN 10003354-0001 Image: Stress of Stres	10-CSC-BLACK	10003350-0001	362	251	139	389	278	146
10-CSC-BLUE 10003351-0001 362 251 220 389 278 227 15-CSC-RED 10003437-0001 - </td <td>10-CSC-RED</td> <td>10003356-0001</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	10-CSC-RED	10003356-0001						
15-CSC-BLACK 10003423-0001 362 251 220 389 278 227 15-CSC-RED 10003437-0001 -<	10-CSC-GREEN	10003354-0001						
15-CSC-RED 10003437-0001 Image: Constraint of the sector of the sec	10-CSC-BLUE	10003351-0001						
15-CSC-GREEN 10003436-0001 I I 15-CSC-BLUE 10003434-0001 362 251 300 389 278 307 16-CSC-BLACK* 10003359-0001 551 362 60 578 389 67 17-CSC-BLACK 10003362-0001 551 362 60 578 389 67 17-CSC-RED 10003362-0001 551 362 60 578 389 67 17-CSC-BLUE 10003361-0001 551 362 100 578 389 107 19-CSC-BLACK 10003432-0001 551 362 100 578 389 107 19-CSC-BLACK 10003435-0001 551 362 139 578 389 146 20-CSC-BLACK 10003520-0001 551 362 139 578 389 146 20-CSC-BLUE 10003532-0001 551 362 172 578 389 179 30-CSC-BLACK 10003531-0001	15-CSC-BLACK	10003423-0001	362	251	220	389	278	227
15-CSC-BLUE 10003434-0001 362 251 300 389 278 307 16-CSC-BLACK* 10003359-0001 551 362 60 578 389 67 17-CSC-BLACK 10003362-0001 551 362 60 578 389 67 17-CSC-RED 10003362-0001 571 362 60 578 389 67 17-CSC-BLUE 10003360-0001 551 362 100 578 389 107 19-CSC-BLACK 10003432-0001 551 362 100 578 389 107 19-CSC-RED 10003438-0001 571 362 139 578 389 146 20-CSC-BLACK 10003527-0001 551 362 139 578 389 146 20-CSC-BLACK 10003532-0001 571 362 139 578 389 149 30-CSC-BLACK 10003533-0001 571 362 172 578 389 179 30-CSC-BLACK 10003531-0001 551 362 172 578	15-CSC-RED	10003437-0001						
16-CSC-BLACK* 10005121 362 251 300 389 278 307 17-CSC-BLACK 10003359-0001 551 362 60 578 389 67 17-CSC-RED 10003362-0001	15-CSC-GREEN	10003436-0001						
17-CSC-BLACK 10003359-0001 551 362 60 578 389 67 17-CSC-RED 10003362-0001	15-CSC-BLUE	10003434-0001						
17-CSC-RED 10003362-0001 Image: style sty	16-CSC-BLACK*	10005121	362	251	300	389	278	307
17-CSC-GREEN 10003361-0001 Image: Stratmark S	17-CSC-BLACK	10003359-0001	551	362	60	578	389	67
17-CSC-BLUE 10003360-0001 551 362 100 578 389 107 19-CSC-BLACK 10003453-0001 551 362 100 578 389 107 19-CSC-RED 10003435-0001	17-CSC-RED	10003362-0001						
19-CSC-BLACK 10003432-0001 551 362 100 578 389 107 19-CSC-RED 10003453-0001	17-CSC-GREEN	10003361-0001						
19-CSC-RED 10003453-0001 Image: Sector of the sector	17-CSC-BLUE	10003360-0001						
19-CSC-GREEN 10003438-0001 Image: Sector of the secto	19-CSC-BLACK	10003432-0001	551	362	100	578	389	107
19-CSC-BLUE 10003435-0001 551 362 139 578 389 146 20-CSC-BLACK 10003729-0001 551 362 139 578 389 146 20-CSC-RED 10003729-0001 551 362 139 578 389 146 20-CSC-GREEN 10003532-0001 578 389 146 20-CSC-BLUE 10003529-0001 551 362 172 578 389 179 30-CSC-BLACK 10003530-0001 551 362 172 578 389 179 30-CSC-BLUE 10003531-0001 551 362 220 578 389 227 35-CSC-BLACK 10003455-0001 551 362 220 578 389 227 35-CSC-BLACK 10003459-0001 551 362 220 578 389 227 35-CSC-BLUE 10003458-0001 550 365 300 578 389 307 36-CSC-BLACK* 10005120 550 365 300 578 389 307	19-CSC-RED	10003453-0001						
20-CSC-BLACK 10003527-0001 551 362 139 578 389 146 20-CSC-RED 10003729-0001 389 146 <td>19-CSC-GREEN</td> <td>10003438-0001</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	19-CSC-GREEN	10003438-0001						
20-CSC-RED 10003729-0001 Image: style sty	19-CSC-BLUE	10003435-0001						
20-CSC-GREEN 10003532-0001 Image: style s	20-CSC-BLACK	10003527-0001	551	362	139	578	389	146
20-CSC-BLUE 10003529-0001 551 362 172 578 389 179 30-CSC-BLACK 10003533-0001 551 362 172 578 389 179 30-CSC-RED 10003533-0001	20-CSC-RED	10003729-0001						1
30-CSC-BLACK 10003530-0001 551 362 172 578 389 179 30-CSC-RED 10003533-0001 - <t< td=""><td>20-CSC-GREEN</td><td>10003532-0001</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	20-CSC-GREEN	10003532-0001						
30-CSC-RED 10003533-0001 Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: style="text-align: center;">Image: style="text-align: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: style="text-align: center;">Image: style=	20-CSC-BLUE	10003529-0001						
30-CSC-GREEN 10003904-0001 Image: style="text-align: center;">Image: style="text-align: center;	30-CSC-BLACK	10003530-0001	551	362	172	578	389	179
30-CSC-BLUE 10003531-0001 551 362 220 578 389 227 35-CSC-BLACK 10003455-0001 551 362 220 578 389 227 35-CSC-RED 10003460-0001	30-CSC-RED	10003533-0001						
35-CSC-BLACK 10003455-0001 551 362 220 578 389 227 35-CSC-RED 10003460-0001 389 227 35 35 35 35 35 35 35 35 35 35 35 35 35 35 365 300 35 365 300 36 36 307 36 307 36 307 36 36 300 37 36 307 36 307 36 307 36 307 36 307 36 307 36 307 36 307 36 307 36 307 36 307 36 307 36 307 36 307 36 307 307 36	30-CSC-GREEN	10003904-0001						
35-CSC-RED 10003460-0001 Image: style="text-align: center;">Image: style="text-align: center;"/>Image: style="text-align: center;"	30-CSC-BLUE	10003531-0001						
35-CSC-GREEN 10003459-0001 Image: style="text-align: center;">Image: style="text-align: center;"/>Image: style="text-align: center	35-CSC-BLACK	10003455-0001	551	362	220	578	389	227
35-CSC-BLUE 10003458-0001 550 365 300 578 389 307	35-CSC-RED	10003460-0001						
36-CSC-BLACK* 10005120 550 365 300 578 389 307	35-CSC-GREEN	10003459-0001						
	35-CSC-BLUE	10003458-0001						
40-CSC-BLACK* 10005187 550 365 400 578 389 410	36-CSC-BLACK*	10005120	550	365	300	578	389	307
	40-CSC-BLACK*	10005187	550	365	400	578	389	410

* 16-CSC, 36-CSC and 40-CSC available in black only, no partition inserts available

Partition Inserts for CSC-Container

Standard color: Black



CSC Partition Inserts (solid board) CORSTAT[™]

Ref	ltem-No.	Dime mm	ensions	No. of slots	Grid mm	No. of bars max.	Cell dimen- sions min. mm	No. of cells max.
03-СЅС-К	12000030	249	60	10	20	6	- 50 x 20 x 60	77
03-CSC-L	12000034	360	60	6	50	10	50 × 20 × 00	,,
05-СЅС-К	12000031	249	100	10	20	6	- 50 x 20 x 100	77
05-CSC-L	12000035	360	100	6	50	10	50 x 20 x 100	//
10-СЅС-К	12000032	249	139	10	20	6	- 50 x 20 x 139	77
10-CSC-L	12000033	360	139	6	50	10	50 × 20 × 155	//
15-CSC-K	12000036	249	220	10	20	6	- 50 x 20 x 220	77
15-CSC-L	12000037	360	220	6	50	10	50 x 20 x 220	,,
17-CSC-K	12000039	360	60	15	20	11/24	- 50 x 20 x 60	160
17-CSC-L50	12000040	549	60	11	50	15	- J0 X 20 X 00	100
17-CSC-L20	12000042	549	60	24	20	15	20 x 20 x 60	400
19-CSC-K	12000038	360	100	15	20	11/24	- 50 x 20 x 100	160
19-CSC-L50	12000041	549	100	11	50	15	- J0 X 20 X 100	100
19-CSC-L20	12000043	549	100	24	20	15	20 x 20 x 100	400
20-СЅС-К	12000044	360	139	15	20	11/24	- 50 x 20 x 139	160
20-CSC-L50	12000045	549	139	11	50	15	- 30 x 20 x 139	160
20-CSC-L20	12000046	549	139	24	20	15	20 x 20 x 139	400
30-СSС-К	12000047	360	172	15	20	11/24	- 50 x 20 x 172	160
30-CSC-L50	12000048	549	172	11	50	15	- 50 x 20 x 172	100
30-CSC-L20	12000049	549	172	24	20	15	20 x 20 x 172	400
35-СSС-К	12000050	360	220	15	20	11/24	- 50 x 20 x 220	160
35-CSC-L50	12000052	549	220	11	50	15	- JU X ZU X ZZU	100
35-CSC-L20	12000051	549	220	24	20	15	20 x 20 x 220	400

Bars are available individually, thus individual compartment sizes are possible. Already assembled sets available on request.



Customer-Store-Lid CORTRONIC[®] - available in black

Ref	Item-No.	Inner Dimensions, mm			Inner Dimensions, mm Inner Dimension			ions, mm
03-16-CSCD	10002655-0001	388	281	30	399	299	35	
17-40-CSCD	10002653-0001	581	392	40	599	399	45	



RSC / American Boxes

CORTRONIC[®] Adhesive Film 10-KB is needed and sold separately (Page 17)

Ref	Item-No.	Inner Dimensions, mm			mm Inner Dimensions, mn		
13-TAB	10002927-0001	362	251	172	373	259	188
15-TAB	10002843-0001	362	251	220	373	259	236
30-TAB	10003146-0001	551	362	172	562	370	188
35-TAB	10003145-0001	551	362	220	562	370	236



Profiled Foam for CSC and TAB

dissipative pink* or conductive**

Ref	Item-No.	Dime	Dimensions, mm			
03 to 16-CSC NS AS	12000113	361	250	20		
03 to 16-CSC NS EL	12000115	361	250	20		
17 to 40-CSC NS AS	12000114	550	361	20		
17 to 40-CSC NS EL	12000116	550	361	20		

* Dissipative fuction of pink profiled foam: max. 6 Months

** Conductive function of black profiled foam: max. 5 Years



Standard products made for quick supply

Custom-made items meet your special needs!

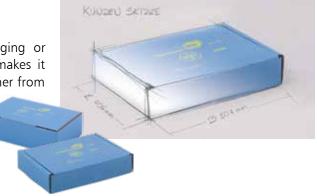
Some ESD sensitive products have special packaging or handling requirements. **COR**TRONIC[®]'s versatility makes it possible for us to meet all your requirements, whether from stock or custom-made.

For shipping ESD sensitive parts

- » EPROM packaging
- » Dispatch boxes with profiled foam or film
- » Constructive dispatch boxes
- » CORPACK with profiled foam

For production, in-plant handling and storage:

- » Stackable boxes
- » Trays
- » Reels, reel holders
- » Storage boxes
- » Partitioned boxes
- » Multibox
- » Fifo-Box



Worldwide availability!

CORSTAT[™] and **COR**TRONIC[®] are used over decades in all parts of the world. Just call us or visit us on the web to find your next dealer.





Corrosion Protection With Vision

CORRUST[®]

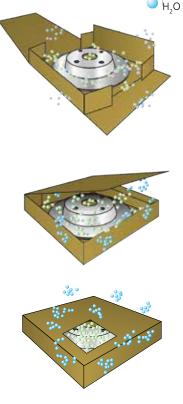
VCI Corrosion Protection Included

Protection against rust

Rust destroys metal. Rust is generated when sulphur dioxide and chloride are oxidised – such as by exposure to humid air. Therefore corrosion protection particularily is important when transporting and storing ferrous and non-ferrous metals for longer periods of time.



VCI molecule
H₂O molecule



CORRUST[®] – A forward thinking principle

CORRUST[®] is a packaging system made from VCI-coated corrugated cardboard. This generously applied coating releases VCI molecules into the atmosphere inside the packaging – which subsequently comprises the actual corrosion protection.

Due to their polar character, these molecules attach to the surface of the metal products inside the packaging and thus prevent (passivate) the metal surface from reacting with oxygen.

The VCI coating applied to the corrugated cardboard is adjusted specifically to the packaging's relevant purpose and therefore ensures that the packaging's interior is always adequately saturated with VCI, and consequently provides long time protection for your product.

VCI: Volatile Corrosion Inhibitor

PROTECTION INCLUDED

Packaging with VCI corrosion protection is extremely easy to use and gives you a real competitive advantage.

CORRUST[®] packaging systems ensure smooth logistics processes with a significantly improved way to maintain the quality of your corrosive products

Michael Hartmann KOLB CoatedProducts[®]

Protecting the environment

Corrosion damage not only affects trade, but also has an impact on the environment. **COR**RUST[®] is 100% recyclable and therefore ideal for humans and the environment, but also a safe choice when it comes to logistic costs.

Wrap - unwrap - and not a spot of rust inside

Traditionally, anti-corrosion packaging for transporting and shipping metal products entails coating a product in grease or a similar corrosion-inhibiting substance, then wrapping it, and then removing the coating again – all of which takes up quite a lot of time, which, ultimately, can drasti-

cally impact on the entire logistics chain. However, **COR**RUST® anti-corrosion packaging now makes this labour-intensive process a thing of the past, does not require any investments in corresponding washing systems or solvents and

has been reduced to just that: Wrap, unwrap – and not a spot of rust inside!



We are able to simulate your shipment process in all relevant climate conditions to assure the best possible protection of your products.

CORRUST[®]

Safety

Corrugated cardboard packages are hygroscopic, i.e. they attract and absorb moisture from the air. This is an extremely useful feature since the cardboard can thus be used to hold large quantities of VCI. The **COR**RUST® VCI coating then forms a perfect barrier between the corrugated cardboard and the product inside. CORRUST® packaging systems can also, on request, be supplied with a moisture-repellent coating on the outside, which makes the system even more efficient for transporting products under difficult climatic conditions.



Protection categories

For protecting ferrous metals, chromium, nickel, silicon aluminium alloys, partially galvanized steel, GGL and GGG

NE (C)

E

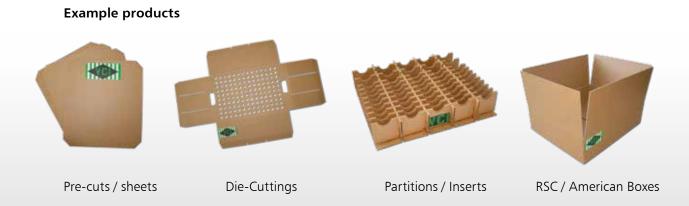
For protecting copper, brass, bronze, nickel silver, copper and manganese aluminium alloys



For protecting magnesium and magnesium alloys, silver and manganese

ММ

For protecting combinations of ferrous and non-ferrous metals, zinc and manganese aluminium alloys, galvanized steel, zinc and copper materials



SKINBOARD® CORRUST SKINBOARD®

Skin Thight Protection

elor

SKINBOARD® CORRUST SKINBOARD®

Product Safety And Outstanding Presentation.

With **SKIN**BOARD[®] tight skin foil wrapping, excellent fixture of the goods on the board is combined with attractive product presentation. The foil and the corrugated cardboard are sealed together by what is known as fibre cut.

This bonding method determines the characteristic properties of the packaging: When unpacking the product, a layer of paper remains attached to the foil, making the **SKIN**BOARD[®] packaging very easy to handle.

Thanks to the use of high-strength adhesive, even heavy parts can be safety fixed to the cardboard for attractive presentation and increased sales.



Versatile skin packaging Strong, variable and functional: Introducing the professional packaging solution for your fragile products.

SKINBOARD[®] is a coated corrugated board with enhanced adhesion properties for skin film packaging

Options included as standard!

Release function:

For small fragile parts of low weight, the strength of the bond between the film and the cardboard must be reduced to a defined value. Special coats ensure that even the most delicate products can be properly positioned on the board and can be easily removed.

SKINBOARD[®] is suitable for packaging with skin foils made in PE and Surlyn[®].





GUARANTEED QUALITY

As a product engineer for technically advanced components that are susceptible to corrosion, I trust CORRUST[®] SKINBOARD packaging from KOLB.

CORRUST SKINBOARD®

CORRUST **SKIN**BOARD[®] products offer optimised protection against corrosion for sensitive products. The corrosion protection properties can be individually chosen, depending on the material properties of the packed goods.

We offer the following options:

- » Steel/iron, chromium
- » Brass, copper, bronze
- » Magnesium and magnesium alloys, silver
- » Multi-metal protection for products made from various metals



SKINBOARD® CORRUST SKINBOARD®

The perfect solution

The coated corrugated cardboard of the **KOLB** CoatedProducts[®] range is the ideal material for protective and sturdy packaging for products that are easily damaged by impact. It offers a range of advantages and thus meets the requirements of customers in a wide range of industries.

With **SKIN**BOARD[®] we offer you an innovative product made in functional corrugated' board that can be printed with your individual designs..

SKINBOARD[®] and **COR**RUST **SKIN**BOARD[®] are suitable for combination with all current skin foils. For **COR**RUST **SKIN**BOARD[®] we recommend using VCI skin foils.

To develop your customised packaging solution, we need the following information:

- » Properties of goods to be packed (material properties, size and weight)?
- » Required skin format?

5 ba

- » Corrosion protection required?
- » Quantity?
- » Printing required?

If desired, we produce a sample packaging for your products free of charge. Why not visit our premises to discuss your ideas with us and to see how **SKIN**BOARD[®] is processed on our skin packaging machine?

Thanks to a skin tight film cover the product will be both packed and presented in an outstanding manner.



VCI – Volatile Corrosion Inhibitor

VCI stands for vapour and volatile corrosion inhibitor and describes a process by which molecules from the skin/VCI coating evaporate and saturate the air inside the packaging. Due to their bi-polar character, these particles attach themselves to the surface of the metal products and fill recesses, thus preventing chemical reactions with oxygen on these surfaces (passivation).

Particles lost through evaporation are replaced by evaporation of more VCI molecules from the coating, so that saturation of the air inside the packaging is ensured at all times.

Result: Dry preservation of the product, doing away with time-consuming and costly conventional preservation and cleaning measures.





SKINBOARD® CORRUST SKINBOARD®

Skin packaging – on corrugated cardboard carrier material

» Advantages:

- » Highly dynamic protection for products that are sensitive to shock
- » Excellent stability thanks to fluted profile
- » No disintegration of the corrugated cardboard layers by the foil restoring forces (special gluing of the individual paper layers)
- » Integrated corrosion protection (with **COR**RUST **SKIN**BOARD[®])
- » Recyclable (paper cycle)

»

- » The skin surface:
- » Optimum bonding between corrugated cardboard and foil
- » Outstanding vacuum properties
- » Suitable for multicolor print on both sides

Your Choice!

Loc		EB-Flute BC-Flute	
		EE-Flute	
(A)		C-Flute FE-Flute	
	(Scale 1:1)	B-Flute	
	The board type:	E-Flute	
	The size:	All skin sizes	





Types, Sizes, Dimensions

CORRUST[®]

CORRUST[®] corrugated cardboard packaging systems can be supplied in all shapes and sizes with features and properties most suited to meet your specific requirements. There is only one thing they all have in common: A high level of corrosion protection!

CORRUST SKINBOARD®

CORRUST **SKIN**BOARD[®] features fully integrated corrosion protection and therefore offers maximum protection for vacuum-packed products.

CORRUST[®] Flex

This flexible VCI corrugated cardboard has been specifically designed to allow products with irregular shapes to be easily packaged and offers them maximum corrosion protection.

All **COR**RUST[®] packaging systems are available in all of the most common DIN corrugated cardboard types and/or – depending on their intended use – can be made specifically and totally to your specifications.

Product information

The above information is correct to the best of our knowledge and reflects the latest **COR**RUST[®] developments. Depending on the product to be packaged, the basic features of the different **COR**RUST[®] packaging types may vary. We are therefore unable to provide a universal warranty for our products. However, we are always happy to conduct tests with our customers to ascertain the level of corrosion protection needed for specific packaging solutions.

Storage in cool and dry conditions mandatory. Please observe handling instructions.



KOLB CoatedProducts®

Grease, moisture, mould: We have something against it!

Simply hygienic - With coatings against moisture, not only is your product protected, but in the case of the Air-Pet-Box, even the environment is protected from "animal mishaps".

CORFENCE against MOSH/MOAH

CORFENCE offers reliable protection against MOSH / MOAH mineral oil migration. The special barrier coating goes hand in hand with customised packaging construction.

Grease-resistant coating

Oily and greasy products such as ball bearings should be safely and securely packed throughout dispatch and storage. Thanks to the grease-resistant coating system from **KOLB CoatedProducts**[®] protection from grease is guaranteed throughout the entire duration of logistics and dispatch.

CORTEC Moisture-resistant coating

Moisture is the natural enemy of corrugated board packaging. But not where the moistureresistant special coating on **KOLB Coated Products**[®] is concerned. Special hardened varnish creates a highly efficient barrier against any kind of moisture.

Anti-mould coating

To prevent the formation of fungus or mould we have developed storage containers that provide the maximum possible product protection even in damp and badly ventilated storage atmospheres.

Wax coating

Whether as an insert or a complete export package, products can be sent on their way securely packed thanks to a special wax coating – even in hard climatic conditions.

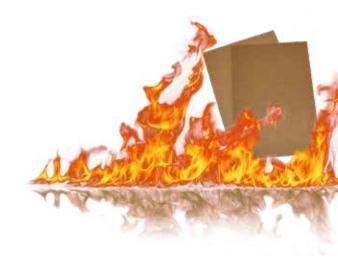




Clever Coatings Due To Your Demand

FlameRetard

is our name for the flame-retardant coated corrugated board for display presentations and packaging for packed items with special security requirements.



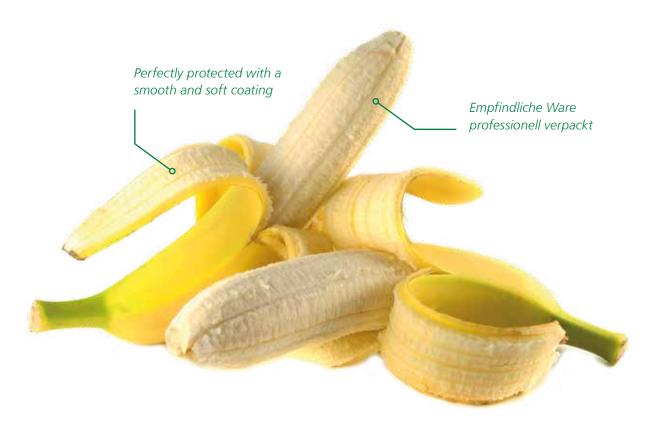
Stop & Go: non-slip and sliding coatings

Packages or intermediate layers that have adhesive or gliding properties are used either to fix goods during transport or for the horizontal automatic loading of boxes and trays. Two different coatings provide different results, but they have one thing in common: process optimization and the simplification of your packaging process. Rub-resistant coatings also help you to send even rough items safely.

KOLB CoatedProducts[®]

Hard & Soft: Surface protection and secure transport for your product

Soft coatings serve to protect surface-sensitive goods. The slip-resistant function also has a positive effect on transport safety. Varnished and sensitive parts will be securely packed in a perfect manner.



KOLB Logistics & Service



Service for advanced

The reputation of the **KOLB** Group is not only based on its high-quality products. But the quality approach also covers all aspects of delivery and just-in-time availability of our goods.

The **KOLB Logistics** department has at its disposal a vehicle fleet with more than 50 trucks, and can thus guarantee just-in-time delivery and efficient order handling.

We are furthermore glad to assist you in every demand regarding packaging automation, co-packing and many more topics of state-of-the-art packaging processes.



COATED PRODUCTS

KOLB CoatedProducts A Division of HANS KOLB Wellpappe GmbH & Co. KG Dr.-Lauter-Straße 2, D-87700 Memmingen Tel. +49 8331 975-308 cp@kolb-wellpappe.com



FRANCE

COATED PRODUCTS HKM 6, rue d'Alsace F-67140 BARR Tél.: +33 388 08 10 38 Fax : +33 388 74 75 39 cguerat@coated-products.com