

**PACKAGING
SOLUTIONS
THAT HELP
SAVE LIVES.**

ESTABLISHED QUALITY, NEW NAMES.

Let's save lives today. This is not only our new motto – it is also our mission. Together with our partners – pharmaceutical companies all over the world – we are doing our utmost to save lives, following in the footsteps of millennia of healers and medical professionals.

For historical reasons, a lot of the medical terminology we use has its roots in ancient Arab medicine. One of the main ways the sophisticated medical and scientific knowledge of Arab civilizations was able to spread into the western world was the availability of Latin as a lingua franca. Anatomy in particular has relied on terms with Latin and Latinized Greek roots since the 16th century.

Scientists and academics from the Middle Ages through today accept that Latin is a compulsory common language. As a so-called “dead language” it has the technical advantage of being frozen in time, unlike living languages that constantly evolve, and can therefore accommodate professional exchange beyond the boundaries of individual languages.

So, in the tradition of centuries of life-saving – we have decided to rename our products using Latinate terms. The new naming convention takes each product's key characteristic and translates it into Latin to create a new name.

GLOSSARY

The following juxtaposition of old and new product names provides an overview on our current product portfolio.

OLD	NEW
Lidding Foils	COVERS
Blister	NORMA
Blister Eco	SALVA
Contact Lens	PURA
Syringes & Catheters	MERA
Coldform Foils	CARRIERS
Coldform	REGULA
Coldform Unique	PROFUNDA
Coldform Lotus	LUBRICA
Coldform Resist	RESISTA
Coldform Penta	RIGIDA
Laminates	CASES
Flexible Blister	FLEXA
Sachet	ALUTA
Stick Pack	FRUGI
Strip Pack	DIVIDUA
Overwrap	VELAR
Safemax	SECURA
Suppository	THERMA
CHILD-RESISTANT FEATURES	
CR TOF	APERTA
CR Laser	LUX
CR Upgraded	FORTE
CR Peel & Push	TRIA
CR Peelable	DUO
CR Bend & Tear	FLECTA
ANTI-COUNTERFEITING FEATURES	
TEOS	ORIGA
Holograms	MUTA
ACF Security Graphics/Design	GRAPHICA
ACF Security Pigments/Ink	COLORA
Security Foil	INTRA
DESICCANT FEATURE	
DryFoil	ARIDA

COVERS (LIDDING FOILS)

This product group comprises a range of lidding foils designed to COVER different base web solutions such as blisters for medicines or medical devices.

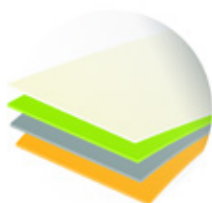


■ Primer
■ Aluminum Hard
■ Heat Seal Lacquer

NORMA (Blister)

“NORMA” is literally the benchmark for lidding foils – as the name says – and has been for more than 50 years now.

- A wide variety of aluminum layers, in hard or soft temper, dull or bright
- Different primers for excellent in-line and off-line printability
- A wide selection of sealants to bond with PVC, PVDC, PP, PE, PET, COC, PCTFE
- Preprinted foils available from the smallest to the largest batch sizes



■ Paper
■ Adhesive
■ Aluminum Soft
■ Heat Seal Lacquer

SALVA (Blister Eco)

When it comes to saving materials, costs, and the environment, this is the lidding foil of choice. That's why we call it “SALVA”, the Latin word for “saved”.

- Significant cost-savings relative to 20 µm blister lidding
- 23% lighter than 20 µm blister lidding
- A sustainable solution that uses less aluminum, less heat-seal lacquer, and more paper
- MVTR barrier still higher than medium range PVDC/PVC





■ PET
 ■ Adhesive
 ■ Aluminum Soft
 ■ Primer
 ■ Adhesive
 ■ PP Sealing Layer

PURA (Contact Lens)

This lidding foil is used to package contact lenses and is designed to keep them as “clean” and “clear” as possible, hence the name “PURA”.

- Efficient solutions with dedicated sealing systems
- Extruded and laminated structures
- High heat-resistant printing systems for multiple sterilization
- Available in reels or also customized die-cut shapes



■ PET
 ■ Sealing Layer

MERA (Syringes & Catheters)

It is essential for syringes and catheters to stay completely sterile in their packaging. That's when you need a foil like “MERA”, Latin for “clean” or “unspoiled.”

- Very good forming properties
- Easy opening feature
- Peel strength adaptable to customer request



CARRIERS (COLDFORM FOILS)

All of the products in this group are coldform foils for various base web solutions that are used to CARRY various medications.



■ BOPA
■ Adhesive
■ Primer
■ Aluminum Soft
■ Adhesive
■ PVC

REGULA (Coldform)

This is the foil that literally raises the bar in the coldform sector, which is why we call it “REGULA”, meaning “bar” or “yardstick”.

- Ultimate product protection against moisture, oxygen, light, and gas
- Excellent deep-drawing performance
- Highest delamination resistance
- Wide choice of specifications available for different applications



■ BOPA
■ Adhesive
■ Primer
■ Aluminum Soft
■ Adhesive
■ PVC

PROFUNDA (Coldform Unique)

The enhanced formability of this coldform foil allows us to mold deeper cavities, hence the name “PROFUNDA” – Latin for “deep”.

- Ultimate product protection against moisture, oxygen, light, and gas
- Superior formability
- Highest delamination resistance



■ BOPA
■ Adhesive
■ Primer
■ Aluminum Soft
■ Adhesive
■ PP

LUBRICA (Coldform Lotus)

A definite must for sticky medication of all kinds – “LUBRICA” is Latin for “slick” – the surface of this coldform foil has similar anti-stick properties to a lotus flower.

- Easy, clean, and complete removal of sticky products
- Elimination of lubrication leads to process optimization
- PVC-free sealing based on polyolefin



■ BOPA
■ Adhesive
■ Primer
■ Aluminum Soft
■ Adhesive
■ PP

RESISTA (Coldform Resist)

As the name “RESISTA” implies, this coldform foil was designed to resist – not just environmental influences, but also aggressive filling materials.

- High chemical resistance due to special lamination technology
- Excellent bond strength between sealant film and aluminum
- Perfect barrier against all external environmental influences



■ PVC
 ■ Adhesive
 ■ BOPA
 ■ Adhesive
 ■ Aluminum Soft
 ■ Primer
 ■ Adhesive
 ■ BOPA
 ■ Adhesive
 ■ PVC

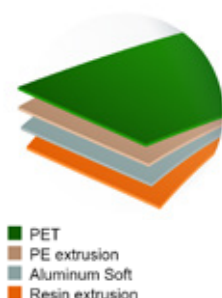
RIGIDA (Coldform Penta)

Wherever the situation calls for increased strength, “RIGIDA” (Latin for “rigid”) is the coldform foil of choice with a 5-layer laminate instead of 3.

- Improved dimensional stability (stiffness)
- Increased cold forming performance
- Excellent flatness (reduced curl)

CASES (LAMINATES)

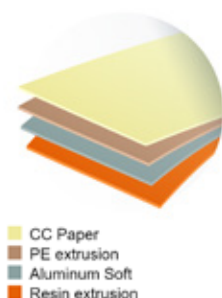
All of our products used as CASING for medicines or medical devices are included in this product group. Please note that the illustrations provided for the following products display a standard layer structure; get in touch with us to find out other variants we offer.



FLEXA (Flexible Blister)

As the name “FLEXA” suggests, this foil is used to produce flexible packaging solutions like blisters that can be folded, bent, or twisted.

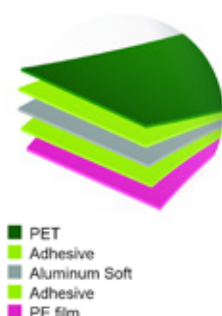
- Child-resistant/senior-friendly features
- Innovative push-through opening
- High barrier properties, water-resistant
- Anti-counterfeiting solutions can be included



ALUTA (Sachet)

This packaging foil is perfect for very flat wrappings such as sachets, which is why we call it “ALUTA” – Latin for “sachet”.

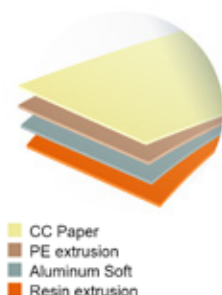
- Wide range of applications, i.e., dry, semiliquid, or liquid products
- Wide variety of sealants, i.e., PE (extruded or film), EAA, ionomer, PP, etc.
- Different printing supports available, i.e., cc paper, cellulose, MGBK, PET
- Child-resistant feature with PET-based laminates (using APERTA)



VELAR (Overwrap)

This packaging foil was designed to wrap medical devices in the same way an envelope wraps a letter, hence the name “VELAR”, which is Latin for “envelop”.

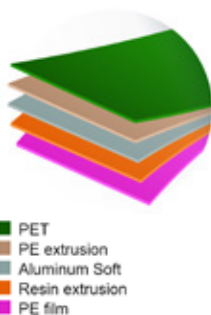
- A wide variety of specifications available, aluminum and non-aluminum based
- Special sealing layers for high-output packaging lines
- Expertise in inhalation overwrap
- Opening features like APERTA or LUX are applicable on PET-based specifications



DIVIDUA (Strip Pack)

This foil is the perfect choice for packaging solutions that can be divided into single units, which is why we call it “DIVIDUA”, Latin for “divisible”.

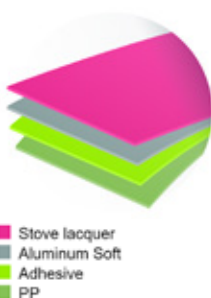
- Excellent barrier properties for sensitive solids like effervescent pills
- Customized solutions for high-output packaging lines
- Adaptable with moisture-absorbing technologies like ARIDA
- Child-resistant/senior-friendly solutions using PET as printing support (via APERTA or LUX)



FRUGI (Stick Pack)

When your product is as efficient as this, it is quite obvious what to call it: “FRUGI”, the Latin word for “economical”.

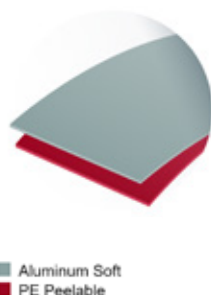
- 40% less packaging material compared to sachets
- Child-resistant/senior-friendly features via APERTA or LUX
- Customized solutions for high chemical resistance or high-output packaging lines
- High chemical-resistant specifications available



SECURA (Safemax)

The key features of this sustainable packaging are its protective barrier properties, which is why we call it “SECURA”, Latin for “safe” or “protected”.

- Customized tray based on the footprint of the device to ensure product protection
- Very high moisture protection guaranteed during shipping worldwide
- High seal integrity with easy opening feature for consumer-friendly peeling
- Meets the demanding requirements of new healthcare products (GMP Standards)
- Complies with the IEC (International Electrotechnical Commission) standard 60529



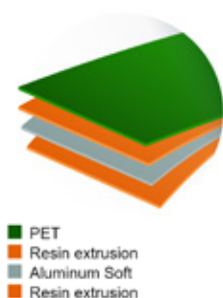
THERMA (Suppository)

This foil – mainly used to wrap suppositories – is designed to impress with its heat-resistant properties, hence the name “THERMA”.

- Barrier against moisture, oxygen, and light remains intact during heat forming
- Structure supports peel and tear opening systems
- Wide processing window thanks to good sealing properties
- Smooth production process/high forming capacity

CHILD-RESISTANT FEATURES

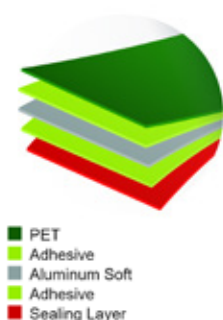
Though pharmaceuticals are designed to heal or prevent illness, they can also be the cause of severe harm – if, for example, they get into the hands of children. We offer a broad spectrum of child-resistant solutions with many different opening features to protect children from accidental harm – and therefore save lives.



APERTA (CR TOF)

This opening feature uses needles to perforate the PET layer and ease the opening of certain packaging solutions. We call it “APERTA”, which is Latin for “open”.

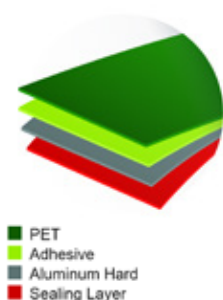
- Available for sachets, strip packs, stick packs, or flow wraps
- Difficult for children to open due to multiple-step approach
- Defined weakening of PET film without loss of barrier (no aluminum damage)



LUX (CR Laser)

The perforation mechanism – available for certain packaging solutions – uses lasers instead of needles, which is why we call it “LUX”, Latin for “light”.

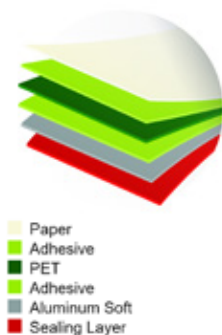
- Available for sachets, strip packs, stick packs, or flow wraps
- Difficult for children to open due to multiple-step approach
- Selective weakening of PET layer by laser beam: PET absorbs laser beam for precise scribing/scoring (no aluminum damage)



FORTE (CR Upgraded)

We designed this child-resistant feature to require extra strength to be opened, hence the name “FORTE”, Latin for “strong”.

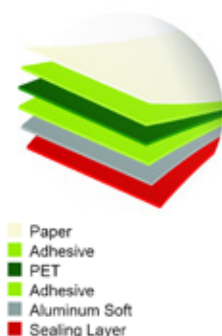
- Sealing (contact) side stays unchanged to standard blister lidding foil
- Complies with global legal requirements for child-resistant solutions
- Upgrade of the standard blister lidding foil to a child-resistant push-through solution
- Excellent in-line and off-line printability



TRIA (CR Peel & Push)

This opening feature requires three steps to access the product – separate the cavity, peel off the paper, and push through the product – which is why we call it “TRIA”, Latin for “three”.

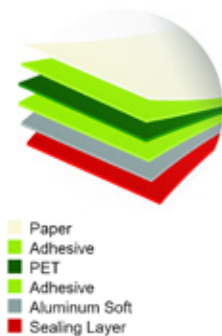
- High level of safety thanks to the three steps necessary to access the product
- Users must first separate the cavity from the blister card to access the peel layer
- The protective film (top layer) must then be peeled off to access the push-through feature in the remaining lidding foil
- Excellent suitability for in-line printing systems



DUO (CR Peelable)

Two steps are necessary to access the product with this opening feature – first separate the cavity and then peel off the paper – hence the name “DUO”.

- Two-step access to sensitive medicines: only after separating one blister cavity from the package is the user able to peel the lidding foil off the base web
- Tailor-made designs for different child-resistant protection levels (F1–F8)
- Typical paper/PET/aluminum structures
- Excellent suitability for in-line printing systems



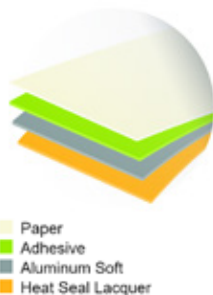
FLECTA (CR Bend & Tear)

First bend, then tear – that’s how you access the product with this opening feature – which is why we call it “FLECTA”, Latin for “bend”.

- Two-step access to sensitive medicines
- After separating the cavity from the blister packaging, users tear along the perforated line to access the medicine
- Users must tear the lidding foil and the bottom foil together in order to access the product
- Excellent suitability for in-line printing systems

ANTI-COUNTERFEITING FEATURES

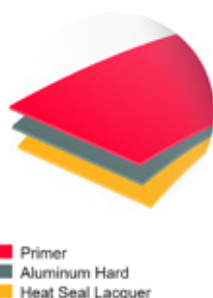
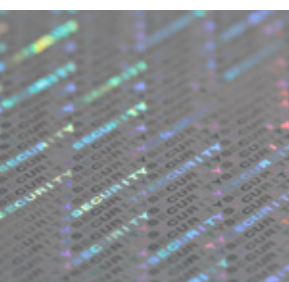
We offer a wide range of anti-counterfeiting solutions powered by outstanding technology, expertise, and processes. Our primary packaging is your best opportunity for security, because it puts the anti-counterfeiting features as close as possible to the product itself. Applied properly, they are extremely effective in protecting people and helping to save lives.



ORIGA (TEOS)

Lidding foils with this feature are destroyed upon opening and cannot be restored. This enables us to guarantee that the medication is in its original state, thus the name “ORIGA”.

- Tamper-evident feature is activated when the lid is peeled off the thermoformed tray
- This feature developed by Constantia Flexibles protects against illegal reuse
- The same smooth opening as conventional peel-to-open packs
- High level of protection for expensive products



MUTA (Holograms)

This feature offers protection with holograms on the primary packaging that change in appearance when the packaging moves. We call it “MUTA”, the Latin word for “changeable”.

- Consumer recognizes holograms as a security feature
- Colorful and eye-catching designs
- Complex converting process



GRAPHICA (Security Graphics/Design)

This anti-counterfeiting feature ensures a high level of security using complex graphical elements, which is why we call it “GRAPHICA”.

- Difficult to replicate thanks to special software and engraving technology
- The various graphical elements can increase security further when combined
- Wide selection of overt and covert graphical elements



■ Primer
■ Aluminum Hard
■ Heat Seal Lacquer

COLORA (Security Pigments/Ink)

We achieve a high level of security with these unique optical effects through the use of special inks and color reactions, hence the name “COLORA”.

- Strong experience with external security features renowned throughout the brand protection industry
- UV-/IR-sensitive inks with color reaction
- Taggants and markers with different readers
- Cooperation possible with your security feature provider of choice
- Thermochromic or color-shift inks



■ Primer
■ Aluminum Hard
■ Heat Seal Lacquer

INTRA (Security Foil)

The integrated security feature in this lidding foil comes from a special design inside the foil, which is why we call it “INTRA”, Latin for “inside”.

- Can be used for all aluminum-based packaging materials
- Unique within the entire industry – security feature developed and produced in-house
- High level of customization
- Uses the same packaging process as regular aluminum foil to accommodate validated process parameters

DESICCANT FEATURE

Over time, we have seen pharmaceutical products become more and more sensitive to moisture. Including desiccant features in our product portfolio is therefore an important and necessary step to take.



■ BOPA
■ Adhesive
■ Primer
■ Aluminum Soft
■ Sealing Layer w. Desiccant

ARIDA (DryFoil)

It is particularly important for some types of medication to be kept extremely dry. In these cases, “ARIDA” – which is Latin for “dry” – is the perfect choice.

- Extends product shelf life thanks to high absorption capacity
- Protects against cross migration of moisture
- Filling good can be dried if required
- PVC-free solution in combination with various PE sealable lidding foils

SERVICE RANGE

In our commitment to the continuous improvement of our portfolio, we see innovation as a decisive success factor. One strong pillar of our business is our service range, which is designed to help our customers achieve continuous improvement of their own business as well.



1. Live stress check

A smart combination of sophisticated printing, measuring, and data processing allows us to determine the precise stress level of the coldform foil in your forming process. The results will reveal whether your blister application is already close to its forming limits or if you are on the safe side.

2. Package characterization

Do you have questions about seal integrity, chemical resistance, or the composition of your packaging materials? Our characterization services offer multiple technologies to obtain the insight you need.

3. Cross-permeation simulation

Using a finite element analysis, we can simulate water vapor permeation through the sealant between the outside environment and inner atmosphere in the cavity. The description of the dynamics of water exchange will enable us to predict the shelf life of a pharmaceutical product in a given packaging solution.

4. Thermal impact simulation

Are you concerned about thermal damage to your product during the heat-sealing process? Using finite element analysis, we can simulate and calculate the thermal stress over time to better characterize its impact.

5. Forming simulation

Are you interested in support with material selection, cavity design, plug material, and forming process parameters? Using our fine element methodology, we can simulate the impact of different parameters, optimize them, and reduce development time for coldform foil applications.

6. Extractables analysis

If you need deeper insight into the extractable compounds of packaging materials, we offer certified extraction processes using various solvents and dry extractants followed by powerful analysis methodologies like LC and GC/MS/MS. Our analysis can also be used as a starting point for your own extractables and leachables study design.

R&D TECHNOLOGIES

Our research and development activities focus on creating flexible packaging solutions that will enable our customers to:

- offer the best possible protection,
- offset increasing cost pressure through innovative solutions, and
- enable successful commercialization through innovation.

Our R&D centers offer customers:

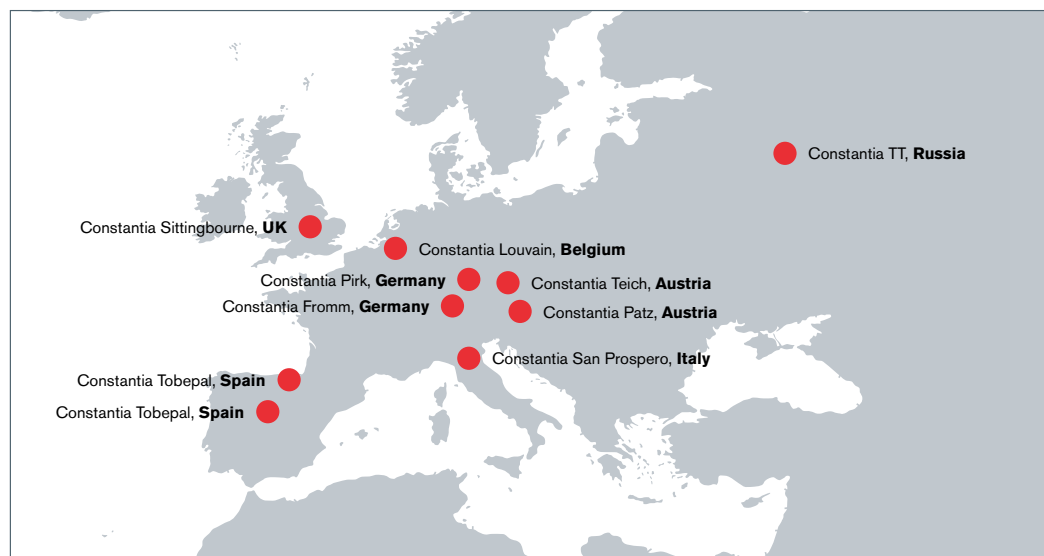
- strong expertise based on close knowledge sharing between our product managers and clients, suppliers, and other relevant stakeholders,
- pilot plants with facilities to develop lacquering and lamination techniques as well as compound materials, and
- a wide range of analytical and test equipment to assess the properties of raw materials and packaging solutions.

State-of-the-art production technologies include:

- aluminum rolling,
- lacquering,
- laminating,
- extrusion laminating and coating,
- printing and cylinder manufacturing,
- die-cutting, and
- slitting.

GLOBAL PRODUCTION: OUR LOCATIONS

To complement our innovative products we offer you a global production and service network. All production plants have the same high-quality standards and offer a wide range of converting technologies, clean room production to class 8, and Drug Master File approved packaging materials (US Food and Drug Administration, FDA).



Partnerships with

Novaprint
Mexico City, Mexico

MTC
Pruszków, Poland

Novaprint
São Paulo, Brazil

National Resources
Melbourne, Australia

Usko
Auckland, New Zealand

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