

# KIC KRONES high-tech adhesives





## KIC KRONES

# Your partner for labelling and packaging adhesives, cleaners, and lubricants

### KIC KRONES

As a subsidiary of KRONES AG, the market leader for beverage filling and packaging technology, KIC KRONES has decades-long expertise in adhesives for labelling and packaging machinery. Not only are our adhesives perfectly matched to each KRONES system, our wide range of products enables us to meet your very specific needs.

But KIC KRONES does more than deliver outstanding adhesives. We also provide expert on-site technical service like no other. Our technicians have strong backgrounds in KRONES machinery. The result for our customers is fast, capable service.

Let's explore the possibilities!

### Benefits we provide for your products

- Wide range of products
- Fast, expert on-site technical service
- Consistent high quality
- Support throughout development and operations
- KIC KRONES adhesives and KRONES machines are perfectly matched
- Packaging materials can be tested in KIC KRONES' laboratory and pilot plant
- You have a single point of contact – saving time and eliminating problems



# KIC KRONES

## Our expertise for your efficient production

KIC KRONES' aim is to increase our customers' production reliability, product quality, and line efficiency. To this end, we have continually evolved and expanded our application engineering services. We test, analyse, and assess every important production step on site at your plant as well as in our lab and pilot plant.

### On-site application engineering services

- Assessment of your line's current condition and consultation for planning overhauls
- Quality check of your labelling and packaging applications
- Settings check on the labelling and packing stations
- Testing of new adhesives for optimum line efficiency and product quality
- Measurement of adhesive consumption on your lines
- Unbiased consultation and appraisal for problems with other consumables such as labels and bottle materials
- Training for machine maintenance and operating personnel with respect to adhesives and machine settings

### Application engineering in our lab and pilot plant

- Unbiased quality check of container, label, and carton materials
- Selection of the best possible adhesive based on container, label, or carton samples
- Comprehensive consultation for the introduction of new labelling and/or packing solutions
- Support for troubleshooting labelling and packing quality
- Comprehensive test runs on our pilot plant in order to explore new systems or packing solutions
- Storage and stress tests of your products (refrigerator, ice water, freezer environments)
- Meaningful reports and analyses on all tests and trials





Precision, security, thermostability

Milk, jam, yoghurt, coffee



**UV gets labels into shape**

UV-curing adhesives are an excellent fit for applying roll-fed film labels to highly contoured bottles. UV radiation followed by a pass through a shrink tunnel ensures precise label fit at every point on a highly contoured bottle.

**Quality assurance**

Dispersion adhesives are ideal for neatly applying tamper-evident seals to glass containers with metal lids.

**ROSO (roll-on shrink-on)**

Hot melt adhesives with high thermostability are used for applying shrinkable wrap-around labels to contoured bottles with small differences in diameter. The labels are then shrunk to precisely fit the bottle's contours in a shrink tunnel.

**Customer requirement**

Customers need special adhesives that achieve a good bond on a wide variety of surfaces, including coated metal caps.

**KIC KRONES solution**

KRONES colfix dispersion adhesives provide perfect final adhesion and outstanding initial tack as well as good, clean handling.



Secure adhesion on a variety of materials  
Delicatessen foods, liquid foods



### High-performance labelling of PET bottles

For clean adhesion of wrap-around labels on dry and cold PET bottles, KIC KRONES recommends hot melt adhesives.

### Two different surfaces – one requirement

Dispersion adhesives are used to securely apply tamper-evident seals to glass jars with metal lids. An alternative method is to use hot melt glue to attach the label to the metal lid.

### Options for glass jars

Casein glue is the classic solution for labelling glass jars. Synthetic adhesives are an alternative option with more stable pricing, high coverage, and good initial tack.

### Wrap-around labelling of cans

Easy-to-use hot melt glues offer fast, secure adhesion – even when the filled containers undergo pasteurisation. Our tip: Use special hot melt adhesives for warm or hot cans.

### Customer requirement

When labelling and packing hot filled products, label overlaps or glued carton flaps can open up, presenting a serious problem.

### KIC KRONES solution

KRONES colfix hot melt adhesives with extremely high softening temperatures remain stable and hold labels and packing materials securely in place – even under high heat buildup.



## Bubble-free, wrinkle-free labelling

Juices, teas, and sparkling juice drinks



**Hot stuff**

Starch adhesives yield the best results for labelling warm and hot-filled beverages. Labels lie smoothly on the container, with no bubbles or wrinkles.

**Sparkling juice drinks**

With special adhesives from KIC KRONES, it's easy to achieve reliably straight, secure labelling results – even after the bottles have been through the pasteuriser.

**Our tip for hot-fill PET bottles**

Use elastic hot melt adhesives with a high melting point.

Adhesives for ROSO applications and subsequent shrink-fitting also yield good results.

**Customer requirement**

Wrap-around labelling of hot-fill bottles with film labels was problematic. The bottle's stiffening elements made it nearly impossible to pull the labels taut enough.

**KIC KRONES solution**

With roll-on, shrink-on technology, film labels are shrunk to snugly fit the bottle's contours, giving the dressed bottle a premium look.



Excellent labelling for PET and glass  
Still and sparkling water



**It's removable**

KIC KRONES hot melt adhesives for returnable PET bottles come off quickly in the washing process.

**Hot melt or wet glue**

Whether for wrap-around labelling using plastic film or paper labels or for wet labelling using cut-and-stack sheet-fed labels, KRONES colfix hot melt and wet glues offer the highest level of security for your product.

**Transparent film labels**

Here, too, KIC KRONES offers special, transparent adhesives that are virtually invisible under film labels.

**Customer requirement**

Transparent labels are becoming increasingly popular among marketing experts. Surveys show that end consumers equate transparency with high quality.

**KIC KRONES solution**

KIC KRONES has developed special, completely transparent hot melt adhesives to achieve a nearly invisible adhesive film under transparent film labels.



Good cleaning, excellent runnability

Beer



**Thinking economically**

Synthetic adhesives are an economical alternative to casein glue. Outstanding initial tack and short setting times make these adhesives attractive for labelling beer bottles.

**Water-resistant adhesive**

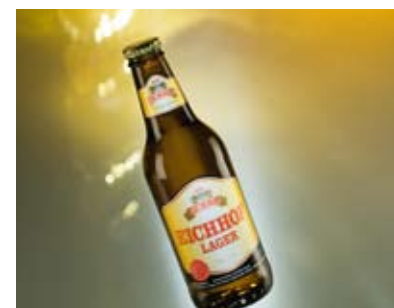
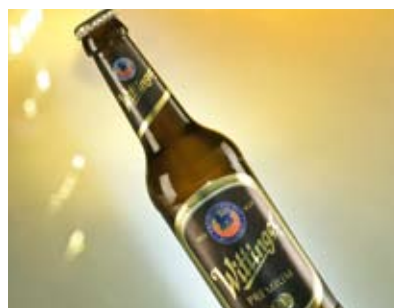
If condensation is likely to occur during the bottling and packing process, the adhesive and labels used must be water-resistant.

**Customer requirement**

Breweries face a particular problem: Large volumes of condensation make for wet bottles. That combined with high processing speeds often results in adhesives being washed right off of bottles.

**KIC KRONES solution**

KRONES colfix adhesives are specially formulated to ensure optimal runnability, consumption, and moisture resistance.



Ice water, neck foil, peel-off labels, swing stoppers  
Design alternatives for your product



**Perfect hold, even on ice**

A special adhesive is used for applying labels to allow bottles to be kept on ice for several days without label slippage.

**Brand positioning**

Neck foiling lends elegance. The use of casein or synthetic adhesive ensures that the foil stays put but is still easy to open.

**Eye-catching design**

Peel-off labels provide a vast array of possibilities.

**Neat application of even the smallest labels**

The tamper-evident seals used on swing stopper bottles require precise glue application and clean, long-lasting adhesion. Casein glues do the job perfectly.

**Customer requirement**

Particularly in the export business, products often have to be extremely ice water resistant. In Africa and South America, ice water resistance of up to 30 days is required.

**KIC KRONES solution**

Using KRONES colfix adhesives in combination with special, ice water resistant label materials can achieve ice water resistance of up to 40 days.



# Elastic adhesives for carbonated beverages

## Soft drinks



**Elastic adhesives for PET**

Labelling with elastic adhesives is a great way to allow for the expansion of PET bottles containing carbonated beverages.

**Increasing efficiency**

Hot melt glues for high-speed applications adhere in a fraction of a second and keep machines running clean.

**Glass bottles are back in style**

Synthetic cold glues engineered for optimum consumption characteristics are certainly worthwhile for glass bottles. Ease of cleaning and low consumption values make for a highly efficient labelling process.

**Customer requirement**

As carbonation levels increase and bottle weights decrease, bottles are subject to considerable expansion. As a result, label overlaps are prone to opening up.

**KIC KRONES solution**

KRONES colfix hot melt adhesives provide high final adhesion and flexibility to optimally compensate for any tension that bottle expansion might create at the label overlap site.



Variety of materials presents challenges  
Champagne and sparkling wine



**Variety of materials on a single bottle**

A bottle of champagne or sparkling wine bears a combination of different materials including glass, paper, foil, and wire – posing a particular challenge for label adhesives. Synthetic adhesive masters this challenge easily.

**Adhesives on ice**

Ice water resistant adhesive is used to ensure that labels stay put while the bottle is chilling in a champagne bucket. Specially engineered casein and synthetic adhesives provide the necessary ice water resistance.

**Customer requirement**

Wine and sparkling wine call for premium label materials, including metallised paper and embossment. These materials often have a strong tendency to recoil and roll.

**KIC KRONES solution**

KRONES colfix adhesives have been specially engineered for high wet tack performance. We offer special adhesives that affix the most challenging labels securely and quickly.



# Surface finishes demand special measures

## Spirits



### Premium products with an upmarket look

The surface finish on glass bottles presents particular problems for labelling. A combination of casein and dispersion adhesives is the right mix for this exacting labelling task.

### Secure and tamper-proof

Our dispersion adhesives put customs and revenue stamps securely in place.

### Precision, down to the smallest detail

Miniature bottles pose a particular challenge. Small, highly specific gluing areas offer no latitude for error. An adhesive with high initial tack provides the necessary precision. High-quality casein or synthetic adhesives fit the bill.

### Customer requirement

Premium products demand premium packaging materials. The highly finished surfaces of spirits bottles often pose challenges for labelling.

### KIC KRONES solution

KRONES colfix adhesives feature outstanding runnability and the highest degree of final adhesion. Labels are held securely in place, even on highly finished glass surfaces.



# Cans



## Clean advertising

Use the lid area of cans for marketing. Promote sales without changing the can's body design. Lid labels are an eye-catching option for placing advertising messages for events, relaunches, or sweepstakes and give cans a finished look. They're a hygiene solution with marketing value.



**Message on a bottle –  
a new approach to an old problem**  
Innovative packaging concepts and alternative means of providing important information to consumers are also shaping the future of adhesives.

For example, fold-out labels attached directly to the container are one way to revamp a product's packaging.



**Familiar products in a new look**  
Beer is only one of many products that are increasingly being bottled in PET. High-coverage hot melt adhesives are a popular option for labelling PET. Dispersion adhesives are an alternative that offer good adhesion to plastic.

# High-performing adhesives for KRONES packaging machines



### What makes a good packaging adhesive?

- High runnability
- Low soiling of machine parts
- Secure adhesion of lacquered and laminated packaging materials
- High degree of flexibility and resistance for freezer packages
- High thermostability and consistent viscosity

KRONES colfix Mega adhesives are designed to provide the utmost thermostability and optimum gluing results.

- Carefully selected materials prevent the adhesive from »burning« and eliminate buildup in the adhesives tank
- Nozzles stay clean and don't clog

### The benefit for you:

Less time spent on maintenance and repairs translates to high efficiency and low downtimes.

### Customer requirement

The high thermal loads involved with using hot melt adhesives can cause a crust to develop in the adhesive tank. When these deposits break away, they are pumped through the tubing system and clog the applicator nozzles.

### KIC KRONES solution

Metallocene-based hot melt adhesives for packaging offer a far higher level of thermostability and far lower risk of encrustation, making clogged applicator nozzles a thing of the past.



Powerful cleaning of all materials and surfaces  
KRONES colclean cleaning agents



**KRONES colclean C 1201**

- Cleaner based on citrus and orange terpenes
- Removes hot melt residue from labelling and packing machine surfaces
- Because it is not highly corrosive of plastics and coatings, KRONES colclean C 1201 is particularly well suited for cleaning gripper cylinders and vacuum bars

**KRONES colclean EV 60**

- Mineral oil-based cold cleaning agent
- Removes hot melt residue from labelling and packing machine surfaces
- Ideally suited for large surfaces and tough soiling

**KRONES colclean cleaning oil**

- Soybean oil-based cleaning agent
- Cleans adhesive tanks on labellers and packers that use hot melt adhesives
- Removes EVA-based adhesives exceptionally well
- Suitable for nozzle, wheel, and roller applicators

**Customer requirement**

Aggressive cleaning agents cause problems such as damage to the precision-engineered rubber vacuum tubes and discoloration of the plastic portions of the machine guards.

**KIC KRONES solution**

KRONES colclean cleaning agents have been specially engineered for use on high-speed KRONES machines. Extensive long-term testing shows that they do not degrade any machine parts.

**KRONES colclean Hotclean UV**

- White oil-based cleaning agent
- For cleaning adhesive tanks in labellers and packing machines
- Especially well suited for use with rubber and polyolefin hot melt adhesives
- Suitable for nozzle, wheel, and roller applicators

**KRONES colclean Wet**

- Cleaning agent based on synthetic surfactants
- Powerful cleaning of wet glue from surfaces and machine parts
- Especially well suited as an addition to the cleaning solution for gluing pallets

This information is based on knowledge and experience gathered in the field. However, due to the variety of materials used and operating conditions that are beyond our control, we strongly recommend that our customers perform their own extensive testing. KIC KRONES accepts no legal liability for the information contained in this publication or from information given in a consultation.

# Why KIC KRONES meets your needs perfectly

## KIC KRONES is the best solution

Labelling and packing have been KRONES' area of expertise for many decades. And providing the highest level of quality in labelling means not only achieving top technical performance but also reliably assessing and accounting for all conditions relevant to selecting the right adhesive.

KIC KRONES is a team of specialists. Adhesives for the vast array of different containers, labels, and filling processes are our specialty. Combine that with our knowledge of labelling machine technology and you've got the best possible solutions for gluing the widest range of carton and label materials.

With KRONES as your machinery builder and KIC KRONES as your adhesives supplier, you're sure to achieve the best possible performance. Every day. Around the world.

Customer requirement	KIC KRONES solution
<ul style="list-style-type: none"> <li>Variety of surfaces</li> </ul>	<ul style="list-style-type: none"> <li>Dispersion adhesives with excellent initial tack and final adhesion</li> </ul>
<ul style="list-style-type: none"> <li>Labelling and packaging of hot-filled products</li> </ul>	<ul style="list-style-type: none"> <li>KRONES colfix adhesives with a high softening point hold packs and labels securely in place – even at high processing temperatures</li> </ul>
<ul style="list-style-type: none"> <li>Wrap-around labelling of hot-fill bottles with film labels</li> </ul>	<ul style="list-style-type: none"> <li>Roll-on, shrink-on (shrink tunnel)</li> </ul>
<ul style="list-style-type: none"> <li>Transparent labels</li> </ul>	<ul style="list-style-type: none"> <li>Special, completely transparent, hot melt adhesives</li> </ul>
<ul style="list-style-type: none"> <li>Returnable glass bottles</li> </ul>	<ul style="list-style-type: none"> <li>Casein adhesive</li> </ul>
<ul style="list-style-type: none"> <li>Adhesives washed out by high levels of condensation</li> </ul>	<ul style="list-style-type: none"> <li>KRONES colfix adhesives with optimum running behaviour, consumption values, and moisture resistance</li> </ul>
<ul style="list-style-type: none"> <li>Ice water resistance</li> </ul>	<ul style="list-style-type: none"> <li>Combination of colfix adhesives and special, ice water resistant label materials</li> </ul>
<ul style="list-style-type: none"> <li>Carbonation and lighter weight bottles</li> </ul>	<ul style="list-style-type: none"> <li>KRONES colfix hot melt adhesives with a high final adhesion and flexibility</li> </ul>
<ul style="list-style-type: none"> <li>Label materials with metallisation and embossing</li> </ul>	<ul style="list-style-type: none"> <li>KRONES colfix adhesives for high wet tack performance</li> </ul>
<ul style="list-style-type: none"> <li>Highly finished bottle surfaces</li> </ul>	<ul style="list-style-type: none"> <li>KRONES colfix adhesives with outstanding runnability and the highest degree of final adhesion on difficult surfaces</li> </ul>
<ul style="list-style-type: none"> <li>Prevent migration of hot melt adhesives in paper labels</li> </ul>	<ul style="list-style-type: none"> <li>Special hot melt formulas with sharply reduced migration behaviour have been developed</li> </ul>
<ul style="list-style-type: none"> <li>Capable, competent support on all aspects of labelling and packaging</li> </ul>	<ul style="list-style-type: none"> <li>KIC KRONES technicians offer support for process optimisation, development, and troubleshooting, with solid expertise in machine and adhesives technologies</li> </ul>



# KIC KRONES high-tech adhesives

