TECHNOMELT

Henkel's Food Safe Packaging Initiative

PROTECTING BRANDS AND CONSUMERS is at the heart of our packaging adhesives business. With the Food Safe Packaging Initiative, we take a closer look at ADHESIVE-RELATED ASPECTS OF FOOD PACKAGING and invite collaborators along the FOOD PACKAGING VALUE CHAIN to an OPEN DIALOGUE striving to constantly IMPROVE SAFETY AND SUSTAINABILITY OF PACKAGING for the industry.

Packaging serves to **INFORM** consumers and **PROMOTE AND PROTECT** its content. For food packaging, the interplay of **DIFFERENT PACKAGING MATERIALS** performs a crucial role in **SECURING and PRESERVING** food, **PREVENTING CONTAMINATION** and **PROTECTING** consumers. Adhesives are often called "**THE FORGOTTEN LAYER**" due to its perceived small piece in the total package compared to inks, boards and foils. The evolving regulatory landscape and increased scrutiny of minor components requires all packaging materials, including adhesives, to meet and exceed requirements and expectations.

OUR VISION is to be **AHEAD OF THE LEGISLATION**, **THE MARKET**, **THE MEDIA** – by setting a **NEW STANDARD** for the future of food safe packaging adhesives committed to **PROTECTING BRANDS AND CONSUMERS**. **LEGISLATION** is influencing food safe **PACKAGING DEVELOPMENT**, **DESIGN AND MATERIALS IN USE**. Moreover, **GLOBALIZATION OF FOOD NETWORKS** further emphasizes the need for **TRANSPARENCY AND TRACEABILITY** along the food and packaging value chain.

Our commitment to **TRANSPARENCY INCLUDES BROADENING COMMUNICATION** on food safe packaging to address a **WIDER RANGE OF STAKEHOLDERS** – from **EXPERTS** like packaging developers and food safety managers to **GENERALISTS** like plant managers, brand owners, retailers – and even **CONSUMERS**. It means sharing adhesive expertise right from the **PACKAGING DEVELOPMENT PHASE to RUNNING SAFE PROCESSES** during operations to ultimately providing **REGULATORY SUPPORT** to customers. This commitment keeps the **FOOD PACKAGING VALUE CHAIN** fully informed on increasingly important food safety topics relevant to packaging adhesives.

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TECHNOMELT

BE FOOD SAFE

WITH HENKEL SOLUTIONS.

TECHNOMELT® PRO Series

Next generation adhesive range — Safeguarding packaging of sensitive foods.





Henkel creates advantage for the packaging industry through a complete range of high-impact solutions and extensive industry knowledge to drive related operational optimization and continuous improvement.

Our TECHNOMELT® PRO Series offers a high level of food safety assurance provided by careful selection of raw materials and strategic formulation approaches.



What are sensitive goods?

For packaging safety experts at Henkel, "sensitive foods" bear a different meaning to the one represented by most food and pharmaceutical manufacturers. Food producers classify sensitive foods as those impacted by temperature or are highly perishable (e.g., fruit, vegetables or meat). Henkel experts use the word sensitive to draw attention to goods carrying high contamination risk from the environment or the packaging. Sensitive goods are often more prone to contamination. They can be exposed to one or more migration factors at higher levels and over longer periods of time.





Which measures can food producers take to safeguard against contamination?

There are several ways food producers can minimize any negative impacts from the environment and the packaging around food products:

- Optimize the package structure
- Incorporate a barrier in the package (e.g., inner bag in folding cartons)
- Optimize adhesive amount applied
- Use adhesives designed for packaging of sensitive goods

At Henkel, we understand packaging of sensitive goods poses special requirements on selected materials. This understanding is why our experts developed a new product range devoted to safeguarding sensitive goods packaging.

FACTORS INFLUENCING MIGRATION	SENSITIVE FOODS EXAMPLES
Shelf-life duration	Flour, sugar, rice and cereals
Adhesive application area in relation to quantity of packed food	Rice, cereals or single-pack candy
Processing, storage and transport temperatures	Pasteurized foods or foods transported in warm climates
Polarity of food stuff	Fatty surface goods (e.g., chocolate, tea or coffee)
Exposure relative to body weight	Baby food or pet food

TECHNOMELT PRO — The Best Choice for You

The TECHNOMELT® PRO series combines unmatched food safety features with outstanding processing benefits. An innovative feedstock combination makes this series the safest hot melt choice for food packaging applications:

- Optimized formulation to reduce risk-bearing substances to far below recommended limits
- Selected raw materials carefully with detailed certifications on the harmlessness to human health
- Included Triple Food Safety evaluation
- Ongoing pipeline development of TECHNOMELT® PRO series to cover a comprehensive range of adhesive requirements and applications.



The new TECHNOMELT® PRO series comes with increased food safety assurance.

Henkel's TECHNOMELT® PRO adhesives have been thoroughly evaluated for their safe use in food packaging. These adhesives have been carefully formulated to meet local food contact regulations, and have an added measure of protection by having undergone extensive review.

Compliance with local food packaging legislation is necessary to do business in the industry in any given location. Food Safety analyses of adhesives is a complex process that requires in depth knowledge of raw materials to interpret results correctly. Our aim is to be highly transparent to our customers with regards to the evaluation and outcome.

Analytical testing is performed on Henkel's TECHNOMELT® PRO adhesives. Experiments are designed by our food safety chemists to replicate conditions of the intended use of the adhesive in packaging. Appropriate food simulants are chosen according to the intended food types, and migration studies are run using the most extreme intended temperatures. Migrants are analyzed using state of the art analytical equipment and techniques to detect and quantify the presence of known packaging materials, as well as to screen for potential contaminants. The analytical work done on Henkel's TECHNOMELT® PRO adhesives provides an extra level of transparency to the contents of the adhesive and is a contributor to the safety of the packaging.