



SUSTAINABILITY REPORT



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BOARD OF MANAGEMENT FOREWORD



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CAPOL, founded in 1975, today is a leading supplier of coatings for the confectionery industry, including glazes, anti-sticking agents, pre-coating and sealing agents, coated acids and machine release agents, as well as natural pigments and flavors. Based on proven recipes and in-depth know-how, the company provides highly innovative and efficient solutions for the finishing of confectionery.

Our brands are well-known in the industry worldwide and are widely used for sugar dragées, chocolate, gum products and other foodstuffs. We face high expectations from our customers, who require solutions that not only bring economic benefits but are also in line with our corporate responsibility.

As a company forming part of Freudenberg, a German technology group that is active throughout the world, we are committed to the Values and Principles of the Freudenberg Group as well as to our own policy of shaping our business processes sustainably and responsibly.

We consider the relevant business and social environment in the context of our value stream and strive to accomplish positive changes in order to ensure greater environmental compatibility. We have been doing so for many years.

Our parent company, the Freudenberg Group, has developed effective programs and initiatives in line with our corporate social responsibility and overarching sustainability goals. These goals and the resulting obligations also apply to us without any restrictions.

You will find examples at:
www.freudenberg.com/company/responsibility

This report gives an overview of our activities in the field of corporate responsibility and the resulting initiatives for greater sustainability.

SUSTAINABILITY – A CHALLENGE

Corporate responsibility not only concerns individual aspects of a company's own value stream but must also take into account the interests of a variety of stakeholders. This also applies to CAPOL but we also have a special focus as a result of our activities in the food industry. Our clear objective is to combine high performance for the benefit of our customers with a long-term growth strategy.

We pay considerable attention to the safety of people and products. It goes without saying that we strive for not operating at the cost of future generations. We are not only aware of our impact on the consumption of resources but aim to minimize or even neutralize such consumption. Furthermore, we are committed to offering our customers solutions that help them achieve their own sustainability targets.

„As a company
we accept responsibility
for the society.“

We supply products used for the production of goods which are supplied to consumers, normally private individuals. The topic of sustainability is becoming increasingly important both for companies and for consumers. This not only concerns the goods actually purchased by consumers but also the way in which these goods are produced.



In addition to the question of the raw materials used, the focus is on the value stream, including aspects such as the reduction of energy or water consumption and production waste. The challenge we face as a supplier to customers in the food industry is to offer individual sustainable solutions at the same time as guaranteeing the highest possible quality levels in terms of the sensory and functional characteristics of our products.

Examples include the CAPOL Green Glazing product range, with certified sustainable (RSPO) palm oil product variants or our commitment to the Initiative for Responsible Carnauba supported by the German Gesellschaft für internationale Zusammenarbeit (GIZ), which aims to ensure fair working conditions in carnauba wax production and to maintain biodiversity in the growing region.

We are also working on alternative solutions for certain raw materials which are still in wide use for example by using sunflower oil for confectionery finishing or by replacing certain animal products such as shellac as part of our long-term innovation strategy.

CAPOL – WHAT WE DO

With its broad portfolio of special solutions and services, CAPOL especially targets manufacturers of confectionery and other industries connected with foodstuffs. In addition to glazes, sealing products and release agents, we offer a comprehensive range of consultancy services on the basis of a background of more than 40 years of market experience and intensive contact with customers around the globe. For us, compliance with quality and safety requirements is an essential part of our policy: our effective HACCP (Hazard Analysis Critical Control Point) system ensures that the safety of foodstuffs is maintained throughout all production and processing stages from the receipt of raw materials through to the dispatch of our products.



Our quality and food safety system is regularly audited by DQS CFS GmbH in accordance with ISO 9001 as well as the IFS and BRC standards. Our health and safety management system is also certified in accordance with OHSAS 18001.

We therefore meet the special requirements of the key standards for our industry, including:

BRC Food (Global Standard for Food Safety)

CAPOL GmbH is certified in accordance with the BRC Global Standard for Food Safety. This certification is recognized by retailers and manufacturers throughout the world. The standard defines a framework for the production of safe foodstuffs at a very high level.

IFS Food (Standard for assessing the quality and safety of foodstuffs)

Certification in accordance with the IFS (International Food Standard), which we have held since 2004, also bears witness to our quality awareness. We have a very high level of compliance with the requirements of the standard.

Kosher/Halal

For specific customer groups, we offer a large number of products with Kosher or Halal certification.

BIO/NOP

We offer a wide variety of organic products.

Partnership is important

Our headquarters are located in Elmshorn, close to Hamburg, Germany. The business model of CAPOL is based on a mixture of direct sales to certain customers via our own sales team and close cooperation with specialized agents and distributors. Our trading partners therefore represent the quality claims of CAPOL towards the customer. With comprehensive training for our trading partners, we ensure outstanding quality in consultancy services and problem solving competence on site. We also provide all trading partners and the customer with comprehensive documentation of product safety and properties.



Our Material Compliance Management (MCM) system ensures compliance with all standards and statutory requirements in this area. Via these sales channels, we reach processors and industrial customers in more than 50 countries.

Since 2013, CAPOL has formed part of Freudenberg Chemical Specialities SE & Co. KG, Munich, a Business Group of the Freudenberg Group, Weinheim.



We produce and distribute throughout the world more than 250 high-performance standardized and customer-specific products for the finishing of confectionery and other food industry products.

These include:

- Glazing & polishing agents
- Anti-sticking agents
- Sealing agents
- Pre-coating agents
- Coated acids
- Flavors
- Pigments

Thanks to the close cooperation between our in-house development and production teams, CAPOL can rapidly implement new technologies in products which are ready for the marketplace. We have repeatedly demonstrated this competence in developing new high-performance products for almost all applications in our industry.

„Our quality is a result
of close inhouse cooperation between
manufacturing and research.“



SUSTAINABILITY AT CAPOL

Our sustainability concept is based on the sustainability strategy of our parent company, the Freudenberg Group. It defines sustainability as part of the corporate culture with its **Values and Principles** as well as the relevant economic and social environment, including the value stream.

In our direct sphere of influence we recognize the demands of all relevant stakeholders, including employees, shareholders, customers, society in general and others. The main focus is on the Values and Principles of Freudenberg: added value for the customer, innovation, leadership, people, long-term orientation and the key principle for greater sustainability: **Responsibility**.

Our goal is to minimize the possible negative impact of our actions. We define this as our **“footprint”**, meaning the direct effect of our business activities on the environment and society.

We support our customers and the users of our products with regard to their own sustainable action. We help them produce more efficiently and reduce negative effects on the environment. We call this our **“handprint”**.

We have defined five areas that serve as indicators of sustainability: cost of materials, waste volume, energy use, emissions and water consumption. Within these five areas we have identified four specific areas that offer the greatest potential for optimization: material efficiency, energy efficiency, emissions and waste. We record developments in these areas in order to measure the relevant changes and also report them to our parent company Freudenberg for the group-wide reporting system.



Materials

Material efficiency
 Recycle, renewable and replacement materials
 End-of-life (EOL) handling of products



Energy

Energy efficiency
 Renewable energy



Emissions

Air pollution/
 emissions



Waste

Waste treatment



Water

Water pollution
 Water consumption

OUR FOOTPRINT

CAPOL strives to review as many factors as possible which are relevant for the value stream. However, it is not always feasible to carry out a comprehensive review. For example, the early stages of raw material production are not entirely under our own control.

This applies to certain natural raw materials of vegetable or animal origin and their derivatives and to certain internal processes of our suppliers. There are many reasons for this situation. Certain raw materials such as gum arabic, a plant resin, carnauba wax, the wax of a palm, or shellac, an animal product, are not cultivated but are gathered in the wild. Where reliable data is available, we use this data to determine the CAPOL footprint. This includes raw material use, water consumption, energy use, waste volumes, emissions, etc. – all closely connected with our value stream.

We have implemented a number of programs some of which called for considerable investment.

The objectives include:

- Reduced energy consumption in production and therefore reduced CO₂ emissions
- Reduced emissions through closed-loop production processes
- Recovery of certain consumables such as solvents
- Reduction of waste in production including packaging and production waste
- Effective insulation of buildings
- Local procurement, where possible, in order to reduce transport distances
- Improved processes for the cleaning of production plant with a view to saving energy and reducing water consumption
- Pre-treatment of wastewater by separation systems
- Strict separation of production waste and cooperation with certified disposal companies

		FOOTPRINT			HANDPRINT	
		Procurement	Production	Transport	Application	Service life
Main areas	Materials 	Raw material and supplier selection	Optimize material usage		Conformity with all valid requirements	Greater durability for products
	Waste 		Reduce waste, recycling	Local disposal	Improve raw material use, reduce cleaning work	
	Energy 		Review and reduce energy consumption		Efficiency gains in production, low-energy processes	
	Emissions 		Reduce solvent use		Higher share of products in accordance with quality standards	
	Water 	Municipal water supply	Reduce water consumption and waste water volumes			Biodegradable raw materials, not water-polluting

In the food industry, the use of critical raw materials is severely restricted as a result of statutory provisions and the requirements of our customers. Nevertheless, organic solvents and other consumables which do not have a natural origin may be used in our production processes. With respect to our products, such substances are normally only required during the production process. In other words, they are not present in the final product which is intended for human consumption. Nevertheless, one of our major goals is to reduce the concentration of ingredients containing volatile organic compounds (VOCs).

Although these substances do not remain in the final product, they are released to the atmosphere when our products are processed by customers. A key goal in our work is to further reduce the concentration of these solvents. CAPOL already offers a wide variety of products which represent a considerable improvement in this area.



As a company, we make special efforts to improve efficiency in the utilization of resources. We have adopted four approaches in this area:

1. Reduced use of raw materials, e.g. with new product formulations significantly reducing the quantity of an ingredient required
2. Energy saving in production through the use of energy-efficient plant and machinery

3. Conservation of resources through the use of renewable raw materials such as natural oils and waxes
4. Avoidance of certain raw materials of animal origin in order to meet the demand for vegan products

In all these areas, we have made significant progress over the past few years and have been able to offer a growing number of products which meet these requirements. This not only reduces our footprint but also brings benefits in terms of our handprint – the achievement of sustainability goals by our customers.

„We consider ethical principles in our daily work.“

We are not prepared to tolerate any part of our value stream being based on practices that are not compliant with international environmental protection and occupational health and safety standards. This also applies to suppliers of raw materials and consumables of any tier. For many years, we utilize our own ethical procurement management program under which we also impose on all our suppliers an obligation to observe all the relevant requirements.

In connection with this program, we expect our suppliers to provide undertakings to comply with the requirements of the UN Global Compact (see www.globalcompact.de/en) or specific undertakings in the areas of health and safety at work, the prevention of child and forced labor, environmental protection and other areas. We apply our own **code of conduct** and an effective **supplier selection system** with clear requirements concerning ethical and regulatory conformity.

CAPOL has already been certified under a Sedex Member Ethical Trade Audit (SMETA) since 2015. In 2017, conformity was confirmed in a further voluntary audit by an internationally recognized certification body without any objections.

OUR HANDPRINT



Our raw materials come from sources throughout the world and we deliver our products across the globe. This is why our responsibility is not limited to the direct vicinity of our company locations in Germany, the UK, the USA and Canada.

Via our parent company Freudenberg, we are members of the **UN Global Compact** and are therefore committed to the protection of human rights, safeguarding the freedom of association, eliminating forced and child labor and a number of other principles.

Compliance with the **regulatory** requirements applicable to our industry is mandatory but our basic ethical principles are equally binding. For example, we set clear targets for greater sustainability. We measure compliance with these targets in order to document progress and, where necessary, work even more intensively on improvements.

„Security has a top priority in our value chain.“

Safety is a top priority in the planning of our processes and the development of our products. Safety refers not only to the protection of people working for CAPOL or with CAPOL products but also to the possible environmental impact of the production or use of our products. This is why we consider the entire value stream with a view to improving processes and contributing to the conservation of resources and environmental protection.

The same applies to our customers. Our goal is to provide them with support for achieving their own sustainability targets by saving energy, reducing emissions and waste volumes, improving productivity, enhancing resource efficiency and of course ensuring safer foodstuffs.

Through a high level of competence, individually tailored processes and the use of natural and renewable resources, we optimize the shelf lives, attractiveness and quality of a variety of confectionery products. Our products, ranging from anti-sticking agents, pre-coating and sealing agents, coated products and machine release agents to our flavors and pigments, are based on tried and tested recipes and mainly consist of natural ingredients or, new, synthetic ingredients where these are more beneficial for the customer. These synthetic ingredients also allow more effective monitoring of the procurement chain; in most cases, full documentation is available concerning the origins of semi-finished products and raw materials and the conditions under which they were produced.



Raw materials and their sources – important for our customers

Our customers place considerable value on raw materials that are as natural as possible. They may be prepared for industrial processing but should otherwise be largely untreated. Natural raw materials are not always cultivated but are in some cases harvested or extracted in the wild. This makes comprehensive monitoring of the supply chain from the origin of a raw material more difficult as neither CAPOL nor its direct suppliers are responsible for raw material harvesting on site. Nevertheless, we take our responsibilities in this area extremely seriously. The main raw materials used for our products are presented below.

Carnauba wax

Carnauba wax is a wax that forms a natural protective layer on the leaves of the carnauba palm and is only produced in north-east Brazil. This natural raw material is an unobjectionable food additive and has been used for many years for the surface treatment of confectionery (as a glaze). CAPOL purchases carnauba wax from qualified processing companies who treat the raw material in accordance with international standards for the foodstuffs industry. The product is mainly harvested by small and very small contractors or casual gatherers. Compliance with requirements such as statutory health and safety standards, fair payment, the avoidance of child labor and other principles can therefore not always be directly ensured in a transparent way in this preliminary stage of production.

In November 2017, we carried out audits of our suppliers and the carnauba fields in Brazil with a view to assessing the situation on site. Our main concern was to ensure conformity with the decree issued in 2016 by the Ministry of Labor of the State of Piauí, Brazil, which calls upon carnauba wax exporters to comply with comprehensive statutory requirements and verifies compliance at regular intervals. We carried out a further inspection visit to our suppliers on site in 2018.

Our inspection in Brazil did not identify any evident deficiencies in the supply chain. Nevertheless, we see cooperation between our suppliers and the Brazilian authorities as beneficial and absolutely essential for ensuring that working conditions during the harvesting of carnauba wax are in accordance with the statutory requirements. In order to be suppliers of CAPOL, companies must meet all the relevant requirements.

Our suppliers of carnauba wax hold certificates issued by the Ministry of Labor to the effect that they meet all the relevant requirements and are official supporters of an NGO which is combating forced labor and slave labor in Brazil. In addition, the suppliers have undergone an ethical source audit by an internationally recognized certification agency and hold appropriate certificates.

„Audits and compliance are a must – even for natural ingredients.“

In our opinion, we have shouldered our responsibilities. Nevertheless, we are intensifying our efforts. A group of public and private organizations including companies, NGOs and state bodies established the **Initiative for Responsible Carnauba** together with the Gesellschaft für Internationale Zusammenarbeit (GIZ). CAPOL GmbH is a founder member of this initiative. One of the objectives of our joint work is to find new approaches to mastering the environmental challenges faced in the areas where carnauba wax is harvested and in the associated industry.

Our goal is to ensure responsible production which respects human rights and international labor conventions and conserves biodiversity. We are convinced that a concerted effort on the part of everyone involved in the supply chain will be needed in order to arrive at sustainable solutions in this key area.

From the honeycomb: beeswax

Beeswax is a yellowish natural wax secreted by the honeybee during the construction of honeycombs. Its relatively low melting point makes beeswax a highly versatile raw material for the foodstuffs industry. We mainly use beeswax in glazes and anti-sticking agents for the production of gums based on gelatin and pectin as well as for sugar and non-sugar hard and soft dragées of all types. We are also following the discussion of the worldwide reduction in bee populations.

Beehives have been in place at a facility of Freudenberg Chemical Specialities, the Business Group of which we form part, in Munich since April 2017. This is part of the "Townbee" initiative developed by the enactus student organization which aims to actively combat the worldwide reduction in bee populations by settling bees in urban areas. The bees are cared for by people who have sought refuge in Germany. This gives them an opportunity to perform useful work which is appropriately rewarded. Since 2018, honey has been harvested in Munich and distributed to employees.

From acacia trees: gum arabic

Gum arabic is based on the sap of African acacia trees. The preferred suppliers of gum arabic are the gum acacia (*Senegalia Senegal*) and the red acacia (*Vachellia seyal*). As a result of its polysaccharide content, gum arabic is an ideal material for the coating of chocolate dragées and provides them with a brilliant gloss. Gum arabic is also a pure natural product that has been used for centuries as a traditional foodstuff or food additive. The trees that produce this resin are not commercially farmed or cultivated but grow in the wild. The resin is harvested by gatherers.

Shellac

Shellac is a natural resin secreted by the female lac bug (*Kerria Lacca*) mainly on trees in India and Thailand. The female insects use it to create nesting cavities. After they have left these cavities, the material can be harvested from the trees; the raw shellac is then processed and cleaned in gentle extraction processes. The result is a food-quality raw material suitable for use as a sealing agent on hard and soft dragées and for chocolate dragées treated with glazes.

For customers who do not wish to use shellac as a result of special nutrition requirements, CAPOL has developed a number of interesting alternatives. In cooperation with the Freudenberg research company FTI, CAPOL has brought to market maturity a cellulose based variant that is free from animal products.



From trees and fields – oil

Natural oils are indispensable for certain processes in the confectionery industry. Oils that have traditionally been important are palm oil, produced from the oil palm, or coconut oil produced from the coconut. Both oils are classed as MCT (medium-chain triglyceride) oils. The cultivation of oil palms is under discussion in connection with the maintenance of natural habitats and biodiversity. This is why CAPOL is a member of the Round Table for Responsible Palm Oil (RSPO), which has the objective of harmonizing palm oil cultivation with the maintenance of natural habitats. In addition, we are developing alternative new products based on polymerized sunflower oil or rape seed oil which is also well-suited for use in the foodstuffs industry and which allow effective monitoring of cultivation.



Economic benefits for our customers

A reduction in the use of raw materials not only has a positive effect on our own footprint but also on that of our customers. Customers who can use renewable products reduce their own environmental footprint and may find that the disposal of production consumables causes less concern.

The following paragraphs highlight a few examples of our positive impact on our customers' handprint.

1. Less is more

Modern finishing products which can be used in lower quantities thanks to new formulations not only reduce the quantity of raw materials used but also bring tangible economic benefits. Customers can meet their own resource conservation targets as well as reducing purchasing volumes and disposal expenses.

2. Reducing machine running times

Most of our products are processed on our customers' machinery. The time required for finishing confectionery depends on the process used. We have developed products that significantly shorten the coating process, reducing energy consumption per unit of product and allowing higher throughput per unit time.

3. Reducing air pollution

It may be very difficult or even not feasible to process certain coating products in solid form. These are normally supplied to the processors as liquids and the use of solvents is normally necessary. The solvents used by CAPOL include high-purity drinking alcohol. These organic solvents evaporate on contact with the ambient air, allowing products such as glazes to set on the confectionery.

In order to reduce evaporation, CAPOL has developed new formulations that allow products to be supplied as pastes rather than as liquids. This approach reduces air pollution at the workplace.

SAFETY FIRST

The top priority in connection with our operations and processes is to protect our employees, our customers and the environment. For many years, we have had a well-developed **HSE** (health, safety and environment) **culture**. We take a wide variety of technical and organizational action to ensure safe working conditions and the protection of the environment. This not only calls for continual investments in safety equipment and modern production processes but also for sensitizing employees to HSE issues and especially providing training. For CAPOL, these are not one-off measures but continuous processes.

Within the framework of Freudenberg's „**We all take care**“ initiative, we take action to improve occupational health and safety, environmental protection and plant safety. Our **“Zero Accident”** initiative has the ambitious goal of avoiding all accidents at work. Our employees' workplaces are designed and regularly inspected in accordance with ergonomic considerations; this also applies to machinery and equipment. All these measures help CAPOL to achieve a low accident rate that is exemplary compared with other companies in the industry.

KEY FIGURES FOR CAPOL

Waste volumes

	2017 ¹	2018 ²
Waste volumes	260.4 t	328.424 t

¹ Not including commercial waste; new procedure for the comprehensive recording of waste volumes since 2018

² Including for the first time: waste produced by an acquisition in 2017

Water consumption

	2017	2018 ¹
Water consumption	9,731 m ³	10,300 m ³

¹ Including for the first time: water consumption of an acquisition in 2017

Energy consumption

	2017	2018 ¹
Energy consumption	2,438,000 kWh	2,962,400 kWh

¹ Including for the first time: energy consumption of an acquisition in 2017

CO₂ emissions connected with energy consumption

	2017	2018 ¹
CO ₂ emissions connected with energy consumption	734.02 t	978.48 t
Primary energy consumption	415.72 t	440.98 t
Secondary energy consumption	318.3 t	537.5 t

¹ Including for the first time: energy consumption of an acquisition in 2017



Image sources: stock.adobe.com (4), istockphoto.com (2), unsplash.com (1), LICHT FORM ARTE – studio für fotografie Michaela Kuhn (4)