# Market Study: Bags and Sacks -Europe (2<sup>nd</sup> ed.)





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Yours faithfully, Oliver Kutsch

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- Improve your understanding of your competitors Who exactly are your competitors - and what are their strengths and weaknesses
- Obtain a more detailed picture of your segment

Learn which time is the best for entering or leaving a market

- Have a look at the future Find out if new investments and technologies are worthwhile and how to gain access to future markets. We also show possible market scenarios
- Recognize opportunities and risks

Identify opportunities & risks on your target markets in time

# This study is especially useful for:

- Manufacturers and distributors of carrier bags, garbage bags, heavy duty sacks, big bags, pouch packaging such as standup pouches
- Suppliers of raw materials such as polyethylene, polypropylene, PVC, PET, paper, kraft pulp and additives like antioxidants or stabilizers
- Manufacturers and traders of plastic films, plastic strips, and paper fibers
- Executive board, technology and production, strategic planning, R&D, market research, marketing, sales and distribution, procurement

# In this brochure you will find the following information:

- An introduction on page 3
- A summary of the table of contents on page 4
- Following this, there are example pages from the study
- Please use the form on the last page to easily order your study or a free reading sample!

In the case of the popular environmental issue of lightweight plastic carrier bags, first consequences of the EU directive 2015/720 can be observed: Most states of the EU have regulations to reduce the consumption of plastic bags. Carrier bags made of paper are frequently exempt from these regulations; their manufacturers could benefit from the EU directive. However, carrier bags make up only a small part of the total European market for bags and sacks that was analyzed already for the second time by Ceresana. The current study also examines, e.g., the development of heavy duty and industry sacks and of pouch packaging for foodstuffs. Ceresana expects the European market for bags and sacks to reach approx. 8.77 million tonnes until 2024.

#### **Wafer-Thin Films**

The study covers the European market for bags and sacks manufactured from polyethylene film, other plastic films, woven plastis, and paper. Polyethylene is by far the most frequently used material. However, individual materials may account for different market shares in various applications. This study divides the market into the segments carrier bags, garbage bags, heavy duty & industry sacks, food packaging, and "other applications".

#### Demand for More Commitment of Laggards

The implementation of the EU directive for the reduction of light-weight plastic carrier bags consumption has not been

tackled equally consequently in all countries. Currently, the EU commission is addressing Greece, Italy, Poland, and Cyprus once again to dun a more determined implementation of the directive. The initial position and urgency are different from country to country: Therefore, the particular national circumstances and initiatives are discussed in the respective country profiles.

#### Positive Signals for Bioplastics

More and more countries, ban certain types of carrier bags already, or, with the aid of special taxes and fees, try to requlate the demand for several products. Usually, light-weight plastic carrier bags made of polyethylene are targeted by these initiatives. Carrier bags made of bioplastics are often exempt from these bans and fees. Bioplastics that are either made of renewable resources (e.g. corn starch) or at least are biodegradable. Importance and public reception of bags made of bioplastics have been increasing considerably in the past years. This becomes apparent by the fact that national legislators make explicit references to these products. In spring 2017, the EU commission once again commented positively on the use of bioplastics in packaging or carrier bags. Even if the market has developed very dynamically in the past years, bioplastics alone are not the ultimate and ecologically perfect solution propagated for a long time. Composting of bioplastics, e.g., does still not work flawlessly in the commonly used facilities.

#### Robust Sacks for Heavy Loads

Heavy duty and industry sacks have gained importance during the past years. Some segments have substituted conventional paper sacks by plastic sacks. In areas such as animal feed or construction materials, e.g. cement, paper sacks continue to play an important role, but given their good properties sacks made from polyethylene have the potential to gain additional market shares in the future. Yet, conventional heavy duty sacks made from plastic films are faced with increasing competition from "Flexible Intermediate Bulk Containers" (FIBC), in the segment bulk material. These FIBC are made from a stable plastic, often polypropylene, and can reach a capacity of up to 1,500 liters. They are often used as transport packaging for construction materials, fertilizers, grain or other bulk goods. Dynamics of the market for heavy duty sacks depends to a large extent on the economic development of the country as well as on the construction industry and the demand for construction material. These two factors are therefore examined closely in the corresponding country profiles.

#### **Stand-Up Pouches**

Mainly metal cans and glass jars are replaced by stand-up pouches. One advantage of flexible plastic pouches is the adaptation to the size of the packaged good, which helps to optimize the packaging size.

## Market Study Bags & Sacks - Europe (2nd ed.): 23 Countries, 74 Producers; 410 Pages

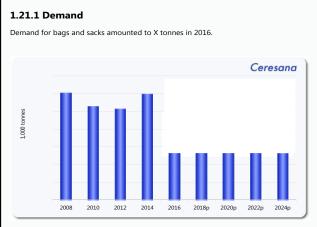
#### 1 Market Data Ceresana European demand for bags and sacks from 1.1 Europe 2008 to 2024 - split by applications 1.1.1 Demand 1.1.2 Production 1.2 Austria 000 tonnes 1.3 Belgium Example from chapter 1 Market analyses on demand, production, and 1.4 Bulgaria trade 1.5 Croatia 1.6 Czechia 2008 2010 2012 2014 2016 2018p 2020p 2022p 2024p Carrier Bags - Plastics Garbage Bags - Plastics Heavy Duty and Industry - Plastics Carrier Bags - Paper Food Packaging - Plastics Others - Plastics 1.7 Finland Heavy Duty and Industry - Paper Food Packaging - Paper Others - Paper 1.8 France 1.23 Turkey **3 Materials** 3.1 Polyethylene (Films) 3.2 Other Plastics (Films) 1.24 United Kingdom 1.9 Germany 3.3 Woven Plastics 1.25 Other Europe 3.4 Paper 1.10 Greece 1.11 Hungary **4 Company Profiles** 1.12 Italy **2** Applications Austria (2 Producers) 2.1 Carrier Bags Belgium (3) 2.1.1 Plastics 1.13 Lithuania Bulgaria (1) Croatia (1) 2.1.2 Paper Czechia (2) 1.14 Norway 2.2 Garbage Bags and Sacks Finland (5) 1.15 Poland France (9) 2.3 Heavy Duty and Industry Germany (15) 1.16 Portugal Sacks Greece (1) 2.3.1 Plastics Ireland (3) 1.17 Romania 2.3.2 Paper Italy (14) Luxembourg (1) 1.18 Russia 2.4 Food Packaging Norway (1) 2.4.1 Plastics Poland (2) 1.19 Slovakia Portugal (2) 2.4.2 Paper San Marino (1) 2.5 Other Applications 1.20 Spain Spain (3) 2.5.1 Plastics Sweden (2) 1.21 Sweden 2.5.2 Paper Switzerland (3) The Netherlands (6) 1.22 The Netherlands Turkey (4) Ukraine (1) United Kingdom (12)

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# Market Study Bags & Sacks - Europe (2nd ed.): 23 Countries, 74 Producers; 410 Pages

b

#### 1.21Spain



Graph : Demand for bags and sacks in Spain from 2008 to 2024

Since 2013 the Spanish Department of the Environment has been implementing a strategy designed to continue to significantly decrease consumption of one-way plastic bags in the upcoming years. The ambitious goal is to considerably reduce the demand for these thin bags year by year and to take free one-way bags completely off the market by 2018. It has been discussed to introduce additional fees for certain products in order to achieve this objective. The aim is to render especially durable bags an attractive alternative and to raise a conscience for this topic. Consumption of carrier bags made of plastics is likely to continue to fall during the upcoming years. The tightened EU packaging directive 2015/720 will cause an additional decrease; as a consequence - earlier than requested by the EU - a minimum fee of 5 cents will be valid for each plastic carrier bag in the whole country starting January 2018. However, retailers have to claim up to 30 cents depending on the bag properties. Thin carrier

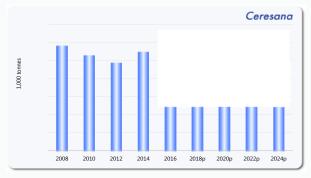
bags with a wall thickness of less than 30 $\mu$ m will cost at least 10 cents, unless they are
biodegradable. Then, the minimum taxation of 5 cents applies. Thicker, reinforced
carrier bags of over 50 $\mu m$ will then be charged with 30 cents. The fee also depends on
the composting properties of the respective carrier bag. Bags made of paper can

in 1,000 tonnes Carrier bags	2008 2010 2012 2014 2016 2018p 2020p 2022p 2024p 2016 × Chapter 1: Extensive market data
Garbage	× on Europe and 23 countries:
Heavy duty & Industry	<ul> <li>Demand split by material</li> </ul>
Foodstuffs	• Demand on the largest markets
Others	<ul> <li>split by applications</li> </ul>
Plastics total	<ul> <li>Production split by plastic and</li> </ul>
Carrier bags	x paper, for the largest markets
Heavy duty & Industry	also split by plastic types
Foodstuffs	• Import and export, each split by
Others	v plastic and paper
Paper total	X X X X X X X X X X X% p.a.
Table: Demand fo	or bags and sacks in Spain from 2008 to 2024 – split by applications

2008	2010	2012	2014	2016	2018p	2020p	2022p	2024p	2016- 2024
х	х	х	х	х	х	х	х	х	X% p.a.
х	х	х	х	х	х	х	х	х	X% p.a.
х	х	х	х	х	х	х	х	х	X% p.a.
x	х	х	х	х	х	х	х	x	X% p.a.
x	х	х	х	х	х	х	х	х	X% p.a.
x	x	x	x	х	x	х	х	x	X% p.a.
	× × × × ×	x x x x x x x x x x x x x x	x     x     x       x     x     x       x     x     x       x     x     x       x     x     x       x     x     x       x     x     x       x     x     x	x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x	x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x	x       x       x       x       x       x         x       x       x       x       x       x       x         x       x       x       x       x       x       x         x       x       x       x       x       x       x         x       x       x       x       x       x       x         x       x       x       x       x       x       x         x       x       x       x       x       x       x	x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x       x	x       x	x       x

#### 1.21.2 Production and Trade

About X tonnes of bags and sacks were manufactured in 2016. For the upcoming eight years, we forecast [...]



Graph: Production of bags and sacks in Spain from 2008 to 2024

2008	2010	2012	2014	2016	2018p	2020p	2022p	2024p	2016- 2024
х	х	х	х	х	х	х	х	х	X% p.a.
х	х	х	х	х	х	х	х	х	X% p.a.
х	х	х	х	х	х	х	х	х	X% p.a.
х	х	х	х	х	х	х	х	х	X% p.a.
х	х	х	х	х	х	х	х	х	X% p.a.
х	х	х	х	х	х	х	х	х	X% p.a.
x	х	x	x	x	х	х	х	x	X% p.a.
x	x	х	х	х	х	х	х	х	X% p.a.
x	x	x	x	x	x	x	х	x	X% p.a.
	× × × × × × × ×	x x x x x x x x x x x x x x x x x x x x	X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X	x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x       x     x     x     x	x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x       x     x     x     x     x	x       x       x       x       x       x       x         x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x         x       x       x       x       x       x       x       x       x      x	X       X	X       X	x       x

Table: Production of bags and sacks in Spain from 2008 to 2024 - split by material

in 1,000 tonnes	2008	2010	2012	2014	2016	2018p	2020p	2022p	2024p	2016- 2024
Import Plastics	х	х	х	х	х	х	х	х	х	X% p.a.
Import Paper	х	х	х	х	х	х	х	х	х	X% p.a.
Import Total	х	х	x	х	х	x	х	х	х	X% p.a.
Export Plastics	х	х	х	х	х	х	х	х	х	X% p.a.
Export Paper	х	х	х	х	х	х	х	х	х	X% p.a.
Export Total	x	х	x	х	x	x	x	х	x	X% p.a.

Table: Import and export of bags and sacks in Spain from 2008 to 2024

2 Applica	tion		
in 1,000 tonnes	2008	2010 2012	2014 2016 2018p 2020p 2022p 2024p 2024
Carrier Bags	х	_× Cha	apter 2: Extensive market data
Garbage	х		Europe as a whole and the 8
Heavy Duty & Industry	х		gest European markets, split
Foodstuffs	х		plastic and paper in:
Others	х		Carrier Bags
Plastics total	x		Garbage Bags and Sacks
Carrier Bags	х		Heavy Duty and Industry Sacks
Heavy Duty & Industry	х	×	Food Packaging
Foodstuffs	х		Other Applications
Others	х	×	
Paper total	х	х х	ХХХХХХХХ ХХ%р.а.

#### 2.4 Food Packaging

#### 2.4.1 Plastics

Pouch packaging becomes more and more popular in the retail sector. Mainly metal cans and glass jars are replaced, but sometimes also rigid plastic packaging. One advantage of flexible plastic pouches is that they can adapt to the size of the packaged good, which helps to optimize the packaging size. Also, this packaging can be manufactured in microwaveable varieties, a property that becomes increasingly important in the course of an increased focus on convenience products. Additionally,

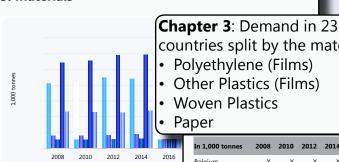
3. Materials

pouch packaging can be printed on increasingly better and they often are an eye catcher at the POS.

For the purposes of this study, the application food packaging includes bags and sacks which are used to pack foodstuffs in retail quantities. Foodstuffs like flour or sugar are also packed and transported in heavy duty sacks. In these cases, they are no longer part of the application "food packaging", but "heavy duty and industry sacks". Therefore, the application "food packaging" in this study covers, e.g., bags for crisps (mainly made of polypropylene) or bags used to pack frozen foods such as vegetables or French fries (usually made of LDPE). It also includes special bags used to pack pasta, pre-baked goods, ready-made meals, dried fruits or salads. Also, the so-called t-shirt bags, supplied by food retailers to customers to pack loose fruit and vegetables or produce sold at service counters such as cold cuts, cheese and fish, are covered by this heading and are not part of the application "carrier bags".

in 1,000 tonnes	2008	2010	2012	2014	2016	2018p	2020p	2022p	2024p	2016- 2024
Germany	Х	х	х	х	х	х	х	Х	х	X% p.a.
France	х	х	х	х	х	х	х	х	х	X% p.a.
United Kingdom	х	х	х	х	х	х	х	х	х	X% p.a.
Italy	х	х	х	х	х	х	х	х	х	X% p.a.
Poland	Х	х	х	х	х	х	х	Х	х	X% p.a.
Russia	х	х	х	х	х	х	х	х	х	X% p.a.
Spain	Х	х	х	х	х	х	х	Х	х	X% p.a.
Turkey	х	х	х	х	х	х	х	х	х	X% p.a.
Other Europe	х	х	х	х	х	х	х	х	х	X% p.a.
Total	х	х	х	х	х	х	х	х	х	X% p.a.

Table: European demand for bags and sacks in the segment plastic food packaging from 2008 to 2024 - split by countries



#### 2.4.2 Paper

in 1,000 tonnes	2008	2010	2012	2014	2016 2018
Germany	х	Х	Х	Х	х
France	х	х	Х	Х	х
United Kingdom	Х	х	х	х	х
Italy	х	х	х	х	х
Poland	Х	х	х	х	х
Russia	х	х	х	х	х
Spain	Х	х	х	х	х
Turkey	х	х	х	х	х
Other Europe	х	х	х	х	х
Total	х	х	х	х	х

Table: European demand for bags and sacks in the se from 2008 to 2024 - split by countries

countries split by the materials: Polyethylene (Films) Other Plastics (Films)

**Woven Plastics** 

Paper

	In 1,000 tonnes	2008	2010	2012	2014	2016	2018p	2020p	2022p	2024p	2016- 202
2008 2010 2012 2014 2016	Belgium	х	х	х	х	х	х	х	х	х	X% p.a.
Polyethylene 📕 Other plastics (film) 📕 Woven plasti	Bulgaria	х	х	х	Х	х	х	х	х	х	X% p.a.
	Germany	х	х	х	х	х	х	х	х	х	X% p.a.
Graph: European demand for bags and sacks from 2	Finland	х	х	х	х	х	х	х	х	х	X% p.a.
	France	х	х	х	х	х	х	х	х	х	X% p.a.
	Greece	х	х	х	х	х	х	х	х	х	X% p.a.
	United Kingdom	х	х	х	х	х	х	Х	х	х	X% p.a.
3.2 Other Plastics (Films)	Italy	х	х	х	Х	х	х	х	х	х	X% p.a.
	Croatia	х	х	Х	х	х	х	Х	х	х	X% p.a.
[]In 2016, X tonnes of bags and sacks made of oth	Lithuania	Х	Х	х	Х	Х	Х	х	х	х	X% p.a.
Europe. In the past eight years, demand thus rose a	The Netherlands	Х	Х	Х	Х	Х	Х	Х	х	х	X% p.a.
About X% of the European demand in 2017 origin	Norway	Х	Х	х	Х	Х	Х	х	Х	х	X% p.a.
strongest relative increases during the next eight	Austria	Х	Х	Х	Х	Х	Х	Х	Х	х	X% p.a.
5	Poland	Х	Х	Х	Х	Х	Х	Х	х	х	X% p.a.
European demand for bags and sacks made from o	Portugal	Х	Х	Х	Х	Х	Х	Х	х	х	X% p.a.
next eight years by an average of X% p.a. to approx.	Romania	Х	Х	Х	Х	Х	Х	Х	х	х	X% p.a.
forecasting horizon.	Russia	Х	Х	Х	Х	Х	Х	Х	х	х	X% p.a.
	Sweden	Х	Х	Х	Х	Х	Х	Х	Х	х	X% p.a.
	Slovakia	Х	Х	Х	Х	Х	Х	Х	х	х	X% p.a.
	Spain	Х	Х	Х	Х	Х	Х	Х	Х	Х	X% p.a.
	Czechia	Х	Х	Х	Х	Х	Х	Х	х	х	X% p.a.
	Turkey	Х	Х	Х	Х	Х	Х		Х	х	X% p.a.
	Hungary	Х	Х	Х	Х	Х	Х	Х		_	
	Other Europe	Х	Х	х	Х	Х	Х				
	Total	х	х	х	х	х	х	х	х	Х	X% p.a.

to 2024 - split by countries

## Market Study Bags & Sacks - Europe (2nd ed.): 23 Countries, 74 Producers; 410 Pages

2015	<ul> <li>Chapter 4: Data and facts on 74 producers, clearly arranged by:</li> <li>Financial key data</li> <li>Production sites</li> <li>Profile summary</li> </ul>	<ul> <li>ible packaging solutions worldwide. The company has more than 3,000 customers and employs more than 10,000 people. Owners of Constantia Flexibles are Wendel Group (about 61%), Herbert Turnauer Stiftung (about 27%), and Maxburg Capital Partners (about 11%).</li> <li>About 56.7% of revenues in 2016 were generated in the food sector, 14.2% in the sector pharmaceuticals and 29.1% in the segment labels.</li> <li>Split by regions, 60.6% of sales in 2016 were generated in Europe, 23.9 % in North and South America, and 15.5 % in Afrika, Asia, and Oceania.</li> <li>The quality and environmental management systems as well as the health and safety system of the company is certified according to ISO 9001, ISO 14001 and OHSAS 18001.</li> <li>In 2016, Constantia Flexibles acquired the Vietnamese company Oai Hung as well as the Italian company Lamp San Prospero. Both companies manufacture pharmaceutical packaging.</li> <li>Early 2017, Constantia Flexibles announced the acquisition of Alucap, an Ital-</li> </ul>
	Product details     EBITDA = Total Revenues     Ceresana	ian manufacturer of packaging caps for diary products. Alucap supplies do- mestic dairies and international food manufacturers with punched aluminum boards and plastic films.
General Informati Divisions, Product Range	<ul> <li>ion about the Company</li> <li>The company produces the following packaging and labeling solutions:</li> <li>Packaging: The company produces various packaging systems for the segments food, pharmacy, household and personal care, and sacks. This includes manufacturing, delivering and converting films, aluminum films, and paper.</li> <li>Labels: The company offers various types of labels such as in-mold labels, SpearRC, SpearSeal, digital labels, digital boards and multi-purpose labels. Applications are the sectors beverages, food, household and personal care, chemistry, industry and pharmacy.</li> </ul>	Specific Information About Bags & Sacks         Constantia Flexibles offers bag packaging in the segments food, home & personal care and pharma.         Further, the company produces paper and plastic bags in Africa.         • Food:         In the segment food, Constantia Flexibles provides several bags. Among those are packaging for coffee, confectionery, wetfood pouches for meat and fish, vegetables and fruit, bags for diary products, bags for snacks such as nuts, cereals or salted snacks, processed food like soups or bread. Additionally, there are bags for Usually, these bags are maintenance.         • Home & Personal care:       Chapter 4: Detailed profiles of the most important manufactu-
Production Sites Profile Summary	The company has over 55 production sites in 24 countries. The Constantia Flexibles Group consists of the former Teich Gruppe, founded in Austria in 1912, and the Haendler & Natermann Gruppe, founded in 1825 and formerly headquartered in Germany. Constantia Flexibles markets its flex-	skin and sun care, hair care binations of PET, PE, OPP, • Pharma:.

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<u>Ammonia</u>	Surfactants		Bitumen - Europe
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Benzene	Toluene		Doors & Windows - Europe
Biocides	Urea		Insulation Materials - Europe
Butadiene	Xylene		Insulation Materials - World
Butanol	Plastics		Paints & Varnishes - Europe
Carbon Black	Bioplastics		Paints & Varnishes - World
Catalysts	Composites		Pipes - Europe
Chelating Agents	<u>Compounds</u>		Plastic Extrusion - World
Crop Protection	Engineering Plast	tics_	Plastic Injection - World
Ethylene - World	Expandable Polys	<u>styrene</u>	Plastic Pipes - Europe
Ethylene - China	<u>Masterbatches</u>		Plastic Pipes - World
Ethylene - USA	Plastics - Europe		Plastic Windows - World
Fertilizers - Europe	Plastics - World		Printing Inks - World
Fertilizers - World	Polyamide - PA6	<u>&amp; PA66</u>	Packaging
<b>Fillers</b>	Polyethylene - Hl		Bags & Sacks - Europe
Flame Retardants	Polyethylene - LD	<u>DPE</u>	Bags & Sacks - World
Flavors	Polyethylene - LL	.DPE	Caps & Closures - Europe
<u>Fragrances</u>	Polypropylene		Corrugated, Solid Board & Carton - Eur.
Hydrofluoric Acid & Fluorochemicals	Polystyrene		Flexible Packaging - Europe
Petrochemicals & Plastics - Iran	Polyurethanes &	<u>Isocyanates</u>	Food Packaging - Europe
<u>Pigments</u>	Polyvinyl Chlorid	<u>e</u>	Labels - Europe
Plastic Additives	Silicones		Plastic Bottles - Europe
Plasticizers	Synthetic Rubber	_	Plastic Caps & Closures - Europe
Propylene - World	Thermoplastic Ela	astomers	Plastic Caps & Closures - World
Propylene - China	Industry		Plastic Containers - World
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