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## Expertise in plastics\_

# AgroPack<sup>®</sup> product range

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Barrier material Bonding agent Exterior wall HDPE

#### **GENERAL INFORMATION**

#### Kautex offers you following advantages:

- Large product line of bottles and jerrycans in HDPE and Coex as well as individual designs.
- Optional decoration methods: Sleeves, Labels.
- Protection of your brand and protection against counterfeiting by use of latest closure generation as well as optional placement of individual embossing in the packaging.
- Large assortment of closure options with different types of function, impermeability and sealing.
- Quality and reliability for our packing products made of HDPE as well as co-extrusion made us an approved partner of prominent enterprises of crop protection industry.

Areas of application for packing with barrier material manufactured by co-extrusion blow moulding:

- Plant protection agents
- Chemical products with a high permeation rate
- Fuels, fuel oil additives
- Oxygen sensitive media
- Paints, laquers, solvents
- Flavours

Product	Volume	Material	Colour	Page
AgroPack <sup>®</sup> Dual	150/250/500/1.000 ml	HDPE	white	4
AgroPack <sup>®</sup> Dual	150/250/500/1.000 ml	COEX	white	5
AgroPack <sup>®</sup> Dual	5/10	HDPE	white/natural colour	6
AgroPack <sup>®</sup> Dual	5/10	COEX	white/natural colour	6
AgroPack <sup>®</sup> jerrycan	15/20	HDPE	white	7
AgroPack <sup>®</sup> AC	15/20	COEX	white	8
Closures for the AgroPack <sup>®</sup> program				9

### AgroPack<sup>®</sup> Dual HDPE 150/250/500/1,000 ml

Round White





 $\bigvee$  Not suitable for food.

"Recycling symbol" in accordance with Directive 97/129/EC and 94/62/EC.

Nomina capacit ml		Weight g	Colour	Packaging unit pcs.	Approval UN	Order no.
150	321 267	22	white	2,910	UN 1H1/Y 1.3	2000086896
250	321 243 B	30	white	3,006	UN 1H1/Y1.3	2000086417
500	321 242 B	45	white	1,596	UN 1H1/Y1.3	2000086419
1,000	321 217 C	73	white	790	UN 1H1/Y1.3	2000086421
1,000	321 217 C	83	white	790	UN 1H1/Y1.3	2000086403



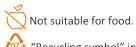


## AgroPack<sup>®</sup> Dual COEX 150/250/500/1,000 ml

Shoulder embossing Round White



Nominal capacity ml	Reference	Weight g	Colour	Packaging unit pcs.	Approval UN	Order no.
150	321 267 Mono PA	22	white	2,910	-	2000086895
250	321 243 B PE/PA	30	white	3,006	1H1/Y1.3	2000086428
250	321 243 B PE/EVOH	30	white	3,006	1H1/Y1.3	2000086426
500	321 242 B PE/PA	45	white	1,596	1H1/Y1.3	2000086366
500	321 242 B PE/EVOH	45	white	1,596	1H1/Y1.3	2000086422
1,000	321 217 C PE/EVOH	73	white	780	1H1/Y1.3	2000086339
1,000	321 217 C PE/PA	73	white	780	1H1/Y1.3	2000086431
1,000	321 217 C PE/PA	83	white	780	1H1/Y1.3	2000086433
1,000	321 217 C PE/PA	110	white	780	1H1/Y1.3	2000086423



"Recycling symbol" in accordance with Directive 97/129/EC and 94/62/EC.

All bottles have the embossing shoulder "AGROCHEMICALS/FITOSANITARIO". The

as well as the raw material code. For other types, forms, weights or colorations





Nominal capacity l	Reference	Weight g	Colour	Packaging unit pcs.	Approval UN	Order no.
5.0	720 075 00	220	natural colour	168	UN 3H1/Y 1.3	2000086517
5.0	720 075 01	220	white	168	UN 3H1/Y 1.3	2000086518
10.0	720 077 00	400	natural colour	90	UN 3H1/Y 1.3	2000086521
10.0	720 077 01	400	white	90	UN 3H1/Y 1.3	2000086522

Not suitable for food.



Recycling symbol" in accordance with Directive 97/129/EC and 94/62/EC.

## AgroPack<sup>®</sup> Dual COEX 5/10 l

Nominal capacity l	Reference	Weight	Colour	Packaging unit pcs.	Approval UN	Order no.
5.0	720 076 00	220	natural colour	168	UN 3H1/Y 1.3	2000086515
5.0	720 076 01	220	white	168	UN 3H1/Y 1.3	2000086516
10.0	720 078 00	400	natural colour	90	UN 3H1/Y 1.3	2000086519
10.0	720 078 01	400	white	90	UN 3H1/Y 1.3	2000086520



Not suitable for food.

The jerry cans are packed on wooden pallets CP1 (1,200 mm x 1,000 mm). The bottom imprints indicate date, vity no. as well as the raw material code. Please request an individual offer for labelled jerrycans or with sleeves as well as for other types, forms, weights or colorations.



"Recycling symbol" in accordance with Directive 97/129/EC and 94/62/EC.





Nominal	Reference	Туре	Weight	Colour	Packaging	Approval UN	Order no.
capacity			g		unit		
l					pcs.		
15.0	723 015 01	Serie A DIN 60	900	white	48	UN 3H1/X1.9	2000086727
20.0	723 020 xx	Serie A DIN 60	1,200	white	36	UN 3H1/X1.9	
20.0	723 020 35	Serie A DIN 60	950	white	36	UN 3H1/X1.9	2000097937
20.0	724 022 00	Serie F DIN 63	750	white	90	UN 3H1/X1.4	2000097917
20.0	724 021 13	Serie F DIN 60	860	white	90	UN 3H1/X1.9	2000097507



Suitable for food.

"Recycling symbol" in accordance with Directive 97/129/EC and 94/62/EC.

The jerrycans are packed in PE-bars on europaletts (1,200 x 800 mm). We would be pleased to prepare you an offer for labeled jerrycans as well as for other models, forms and coloring.

#### AgroPack<sup>®</sup> Jerrycans HDPE 15/20 I

Bottom imprints Label Different forms



Bottom imprints Label Different forms



Nominal capacity l	Туре	Weight g	Colour	Packaging unit pcs.	Approval UN	Order no.
15.0	Seri AC DIN 60	930	white	48 on CP1-pallet	UN 3H1/Y 1.9	
20.0	Seri AC DIN 60	1,100	white	36 on europallet	UN 3H1/Y 1.9	

Not suitable for food.



"Recycling symbol" in accordance with Directive 97/129/EC and 94/62/EC.

The jerrycans are packed in PE-bars on europaletts (1,200 mm x 800 mm) or on CP1-paletts (1,200 mm x 100 mm).

We would be pleased to prepare you an offer for labeled jerrycans as well as for other models, forms and coloring.



## Closures for the AgroPack<sup>®</sup> product range

Type of closure	ml/l	Type of seal	Approval UN
	150 ml	Alu/Surlyn	
	150 111	tamper evident ring and induction sealing	
AgroPack <sup>®</sup> Dual		induction sealing	х
		push & turn with induction sealing	
HDPE & COEX	250 ml 🗕	tamper evident ring and induction sealing	х
	250 111	venting closure with induction sealing	Х
		tamper evident ring and PE-liner	
		tamper evident ring and PE-PA-PE-liner	
		induction sealing	Х
		push & turn with induction sealing	
	500 ml	tamper evident ring and induction sealing	х
	500 mi	induction sealing	х
		tamper evident ring and PE-liner	
AgroPack <sup>®</sup> Dual		tamper evident ring and PE-PA-PE-liner	
HDPE & COEX		induction sealing	х
		push & turn with induction sealing	
		tamper evident ring and induction sealing	х
	1,000 ml —	induction sealing	х
		tamper evident ring and PE-liner	
		tamper evident ring and PE-PA-PE-liner	
		Induction sealing	х
		tamper evident ring and induction sealing	X
	5.01	tamper evident ring and PE-PA-PE-liner	X
		push & turn with induction sealing	X
AgroPack <sup>®</sup> Dual		venting closure with induction sealing	x
HDPE & COEX		induction sealing	х
	10.0	tamper evident ring and induction sealing	Х
	15.0	tamper evident ring and PE-PA-PE-liner	Х
	20.0 l — COEX	push & turn with induction sealing	х
		venting closure with induction sealing	Х
		<u> </u>	
AgroPack <sup>®</sup> Dual HDPE	20.0	induction sealing	х
		tamper evident ring with induction sealing DIN 60/61	Х
AgroPack <sup>®</sup> Dual	15.0	tamper evident ring with venting DIN 60/61	X
HDPE & COEX		tamper evident ring DIN 60/61	X
	20.01	tamper evident ring with venting DIN 60/61	x
	20.01	tamper evident ring DIN 60/61	х

For other colours and standard wads with different facings on EPE and cardboard backing please ask for an special offer.



## Know how and competence\_ for successful products

KAUTEX Textron has been specialised in manufacturing extrusion-blown plastic containers for eight decades. Goal-directed with uncompromising standards for quality and customer focus, we have made our products to belong to the most successful on the international market. We are meeting the challenges of tomorrow by resolutely

leveraging the capacity for innovation and technological leadership in plastics processing of our international group.

#### **Standard Packaging**

- Successful products for laboratories, chemical industries and pharmacy
- Many versions, sizes, materials, accessories
- For special applications also possible with barriers (coex, fluorination)
- Available ex stock
- Many models available with UN approval

#### **Special Packaging**

- Bottles and jerrycans made of PE, PP, PVC and PETG; for special applications also available with barriers (coex)
- The customer determines the design and pays for the mould; the products are supplied only to this customer
- UN approval available
- Rapid Prototyping concept



- Jerrycans Jerrycans: 2 |/2.5 |/3 |/5 |/6 |/8 |/10 |/12 |/15 |/20 |/25 |/30 |

- AgroPack<sup>®</sup> Product Range Jerrycans for crop protection agents: 5 I/15 I/10 I/20 I

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# Intended use of **products**\_

## Materials at Kautex

The bottles and containers in this catalogue are, if not labeled otherwise, suitable for foods and satisfy the European requirements of Regulation (EC) No. 1935/2004 and Regulation (EU) No. 10/20111. The bottles and containers can therefore be used within the European Economic Area as food packaging. We would be glad to provide the corresponding declarations of conformity upon request and recommended closures which are safe for contact with foods and would be suitable for your applications.

The bottles and containers in this catalogue satisfy the European legal requirements for packages for cosmetic goods according to Regulation (EC) No. 1223/20091. They are therefore permissible for use within the European Economic Area as packaging for cosmetic products. The conditions for use and notices regarding safe use found in the respective declarations of conformity and product data sheets must be observed.

Our UN packagings satisfy the legal requirements of the GGVSEB and the European agreements ADR, ADN and RID for the carriage of dangerous goods by road, rail and inland waterways. The UN dangerous materials packagings satisfy the requirements of European chemical law for packages for hazardous substances and mixtures according to Regulation (EC) No. 1272/2008.

They are therefore permissible for use within the European Economic Area as packaging for hazardous substances and mixtures. The provision and notices regarding the proper use of the packaging according to the UN permits of the Federal Institute for Materials Research and Testing (BAM) must be observed.

Our products can frequently also be used or adapted for purposes other than those cited. We possess our own productions facilities in which packages of pharmaceutical and medical products can be produced in accordance with GMP standards for pharmaceutical products and medical devices pursuant to Directive 2003/94/EC and Directive 93/42/EEC.

If you have a use in mind for pharmaceutical and medical purposes or a use that deviates from the above, please contact us so that we can find a solution tailored to your needs. The same holds true for uses outside of the European Economic Area and for UN dangerous goods packages that fall outside of the territorial scope of the European agreements ADR, ADN, and RID. Without consulting with us, any uses that deviate from the proper uses listed above lie in the responsibility of the user.

#### Registration

As we are manufacturing products according to the REACh regulation, we are not directly affected by the registration. However our suppliers are subject to this obligation and we are working closely with them.

#### Substances of Very High Concern – SVHC

The currently applicable SVHC list (candidate list) defines substances for which there is a registration obligation to customers and downstream users. According to article 33 of the REACh regulation, the manufacturing company shall "supply to the consumer all information available to him concerning the safe use of the product, and shall at least supply the name of the relevant substance".

#### Substances of REACh Appendix XIV and XVII

Based on the substances defined in the candidate list, the EU discusses which of these substances require authorization. In cooperation with our suppliers, we are launching appropriate activities in case that our products contain substances listed in Appendix XIV so that they have to be replaced.

#### Restrictions are listed in Appendix XVII:

The restrictions are very specific and often combined with limit values. Again, Kautex is in close contact with our suppliers in order to ensure compliance with the material restrictions. You will find more detailed information related to REACh at http://echa.europa.eu/

Without UN permits, our products may be used for packaging for hazardous substances and mixtures according to Regulation (EC) No. 1272/2008 only if the user can guarantee that the requirements according to Article 35 of this regulation are observed. This check must be performed by the user on his or her own responsibility. In particular, the user must make sure the respective content does not damage the materials of packages and closures or react with these materials to form dangerous compounds.

#### Polyolefins (PE): LDPE, HDPE, PP

- Physiologically inert
- Flexible and inherently stable
- Good chemical resistance
- Shatter-proof
- PP is autoclavable

#### Polypropylen (PP)

- Rigid and inherently stable
- Very good chemical resistance
- Features a very good resistance against tension cracking
- In thin layers almost transparent, thicker layers are translucent up to opaque white

#### Low-density Polyethylene (LDPE)

- Flexible, tough and shatter-proof
- In thin layers almost transparent, thicker layers are translucent up to opaque white
- Resistant to water, aqueous solutions

#### **High-density Polyethylene (HDPE)**

- Rigid and shatter-proof
- Slightly transparent in thin layers, in thicker layers weakly translucent to opaque white
- Resistant to water, aqueous solutions and most chemicals
- Excellent water vapour resistance

#### Polyvinyle chloride (PVC hard)

- Physialogically inert
- Crystal-clear or transparent brown
- Good chemical resistance
- Extremely rigid, high breaking resistance
- High transparency
- Resistant to water, aqueous solutions, alcohols and oils
- Slight gas permeability, e.g. to oxygen
- Adequate water vapour resistance in most cases

#### Co- Polyester (PETG) (Polyethylene Terephthalat Glycole)

- Pysiologically inert
- Flexible and inherently stable
- High transparency (glass-clear), optically brilliant
- Shatter-proof
- Resistant to water, aqueous solutions, salts,
- Aliphatic mediums, hydrocarbons und oils



## Usage instructions\_ for bottles, jerrycans and closures

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#### **1** General Information

This usage instruction contains important information in connection with German law governing product safety in order to ensure the safety and protect the health of users. It must be ensured that this information is brought to the attention of the users (Directive 2001/95/EC on General Product Safety).

In the case of UN dangerous goods packaging, all stipulations and notes on the respective UN approval relating to proper use of packaging are to be respected and communicated to any and all parties using this packaging for dangerous goods. Only the respective closures licensed in the respective approval may be used. UN approvals can be viewed at the homepage of the Bundesanstalt für Materialforschung und -prüfung https://app.tes.bam.de/php/d-bam/index. php?id=start

#### 2 Storage

The recommended storage temperature for bottles/jerrycans should be between + 5 °C and +40 °C. Higher temperatures may cause deformity of the bottles/jerrycans.

The bottles/jerrycans must not be exposed to direct sunlight in order to avoid the containers' mechanical properties being negatively affected.

#### 3 Use/filling

The unused bottles/jerrycans should only be used up to 5 years after the production date. Please make sure that the packaging and in particular the sealing zones are not damaged/negatively affected when emptying and filling the containers. Avoid any and all mechanical or thermal damage to the bottles/jerrycans. Please use the degassing closures for gaseous goods.

#### **4 Filling hot substances**

Do not stack the bottles/jerrycans while they are still warm. The bottles/jerrycans may only be closed after having cooled down, or only with a degassing closure in order to ensure pressure equalization.

The bottles/jerrycans should be able to cool off quickly. If they maintain higher temperatures (60–80 °C) for a lengthy period, it could cause permanent deformation of the jerrycans. The bottles/jerrycans must be filled in an upright position on a level surface. Floors or areas with openings or unsuitable pallets (light pallets) should be avoided.

Ensure the packaging container is securely positioned and fill the filling product into the filler opening provided for this purpose at atmospheric pressure. If the filling temperature should ever exceed 40°C, consult the supplier of the packaging container beforehand. To prevent vacuum deformation when cooling down, measures must be taken to ensure sufficient ventilation of the packaging container to compensate for the vacuum. Stacking should also be avoided until the packaging container has completely cooled down.

Packaging containers for the transport of dangerous goods must be properly closed both after filling and before handing over for carriage.

#### **5** Chemical stability

Our products without UN approval may only be used as packaging for dangerous substances and mixtures in accordance with Regulation (EC) no. 1272/2008 if the user ensures that the requirements set out in Article 35 of this Regulation have been adhered to. This inspection is to be conducted by the user under his own responsibility. In particular, it is to be inspected whether the respective content does not damage the material constituting the packaging and fastenings or can react with these to form hazardous compounds. You will find information on the chemical stability of basic materials that are used in our catalogue. Please follow the link: https://www. kautex.com/en/packaging/catalogs-brochures

The filling product is then allocated (and hence evidence of chemical compatibility provided) either using the assimilation method described under ADR 4.1.1.21 or via allocation according to a laboratory method test.

#### 6 Emptying

As packaging containers do not usually have a bottom outlet, they can only be emptied via the filler opening. This can be done independently or by using suitable pumps or suction devices.

When the content is poured out independently, there is a tendency for the packaging container to "gurgle" (content surge) so the container must be emptied with appropriate caution. If the packaging container is mounted on a surface when the content is emptied out, the surface should be such that it does not damage the packaging container. If larger packaging containers are also emptied in this way, appropriate levers and turning devices are to be used. When emptying using a drum pump or suction device, ensure that the packaging container is standing on a level surface free of foreign bodies. The container must be secured to prevent it from tipping over. The extraction lances should be suitable for the size of the container and the diameter of the filler opening so that these do not damage the packaging container.

The emptying of the container should never be carried out under pressure. It should also be ensured that no vacuum forms in the packaging container during emptying.

#### 7 Re-use

Packaging containers are basically designed for one-off use, or they can be reused depending on the design and the preceding use. The prerequisite is that before refilling and handing over for conveyance, the container is inspected to ensure it is free from corrosion, contamination or other damage.

In any event, it should be ensured that the packaging container meets the same standards for re-use as it did before the initial filling. Every packaging container that shows signs of reduced strength must no longer be used. (ADR sub-article 4.1.1.9) The responsibility for inspection and re-use lies with the user.



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