

# Collapsible Aluminium Tube for the Cosmetics Market

Tube dimensions 28x145 mm

THE INTERNATIONAL EPD® SYSTEM

Environmental Product Declaration

In accordance with ISO 14025:2010

EPD REGISTRATION NUMBER: S-P-11867 ISSUE DATE: 2024/03/28 VALIDITY DATE: 2029/03/27 REVISION DATE: PROGRAMME: The International EPD® System EPD International AB Box 210 60 - SE-100 31 Stockholm, Sweden www.environdec.com - Info@environdec.com

This EPD provides current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com.













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Content

LCA Methodology onmental A ormance

ditional informatio & references



The ALLTUB GROUP is an integrated global aluminium packaging specialist producing aluminium tubes, laminate tubes, aluminium cans and aluminium cartridges.

With a global market share of over 10% (over 20% in Europe and North America)\*, the Alltub Group is the worldwide leader in the manufacture and supply of collapsible aluminum tubes.

\*source : estimation based on the European Tube Manufacturers Association (ETMA) statistics.











France Saumur

Aluminium tubes Aluminium cartridges 230 employees

Italy Cividate Al Piano

Aluminium tubes Aerosol cans **270 employees** 

#### Germany Kirchheimbolanden Aluminium tubes 150 employees

Langenfeld Laminate tubes 50 employees

Czech Republic Kolin Aluminium tubes 320 employees

Mexico Mexico city Aluminium tubes 320 employees

## **Company presentation**

With **five production sites in Europe** and **one in Mexico** and a global sales network, ALLTUB GROUP is the perfect partner for customers requiring stylish, completely airtight and **100% recyclable packaging**.

Employing **1,300 people worldwide** and generating over 180 million Euros of annual sales, the ALLTUB GROUP has over 65 production lines manufacturing over 1.5 billion units per year.

All plants are certi ed ISO 9001 with additional certifications such as ISO 14001 (Alltub Central Europe s.r.o and Alltub France SAS), ISO 15378, ISO 50000 (Alltub Deutschland) and ISO 22000, BRC IoP, as well as Drug Master File registrations with the US FDA and Health Canada.

This EPD is based on primary data of Alltub Central Europe (CZ) and Alltub Mexico (MX) sites.

ecyclable packaging. ople worldwide and generating over 180 mi





DIAMETER (mm)			11	13,5	16	19	22	25	28	30	31,2	32	35	40	50
LENGTH	mi	in.	55	55	65	85	90	100	120	120	125	130	130	130	150
(mm)		ax.	70	95	105	130	150	165	190	190	190	190	200	215	200
FILL VOLUME	mi	in.	2	5	8	15	20	27	50	50	67	70	85	115	200
(ml)	max.		3	10	14	25	45	60	80	95	109	115	135	200	250
	56	INJ		•	•	•	•	_				_			
	68	INJ													
		OP		•	•	•		_							
		OR													
		CN	•	•	•	•		_				_			
	M7	INJ		•	•	•									
		OP	•	•	•	•	•	_				_			
	M8	CN			_										
		CN		•	•	•	•	•						_	
	82	INJ				•	•								
		OP			•	•		•				_		_	
	M9	CN													
		INJ			_	•	•	_	•			_	•	_	
		OP		•											
		EM		•	•				•	•		_			
		OR							•						
THREAD	92	OP	_	_	_	•	•	•				_		_	
	110	EM	_												
		OP		_		•	•	•	•	•		•	•	•	•
		OR											•		
	M11 (	OP INJ		_		•	•	•	•	•	•	•	•	•	•
		OR													
		CN		_	_			•		•		_		_	
		OR													
	M12	EM					-			•		_	•		
	M13	EM			_	•	•	•		-		_	-	-	
	135	EM					•			•			•	•	
		OP					•			•			•		
		EM													
	M15	OP													
		OP							•	•	•	•			
	M18	OR							•	•			•		•
	14118	OP												•	•

#### **Company presentation: Range of products**

Collapsible aluminium tubes are produced at ALLTUB's plants in Cividate (Italy), Kolin (Czech Republic), Saumur (France), Kirchheimbolanden (Germany) and Mexico City (Mexico).

Tube sizes range from 2ml up to 250ml fill volumes with a large variety of cap styles available.

ALLTUB's product data sheet provides comprehensive details of the tube sizes available, complete with corresponding thread designs/dispensing mechanisms and in accordance with the cap type to be applied onto the tube.

The reference plants for this EPD, upon which data was submitted and analysed, are **ALLTUB Central Europe (CZ)** and **ALLTUB Mexico (MX)** and the concerned product is an unbranded aluminium tube<sup>\*</sup> with dimensions 28 x145mm and manufactured with primary aluminium.

\* To define a tube as an unbranded one, it is enough to define its diameter, length and the kind of aluminium (primary or recycled). Other parameters are related to the customized customers tubes.

TYPE CN

with a plastic

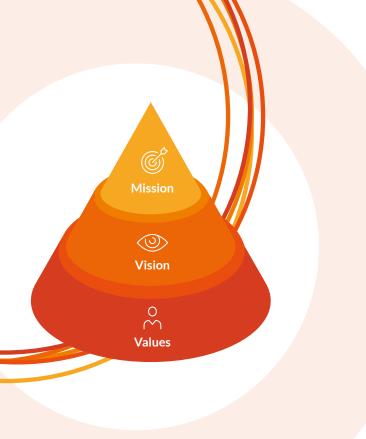
nozzle





with membrane and plastic thread ALLTUB GROUP aluminium tube technical data sheet

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Conte declarat

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Environmental performance

Additional information & references

## **Company vision & values**

ALLTUB GROUP is an **aluminium packaging** specialist, worldwide leader in **collapsible tubes**. The group provides sustainable solutions for customers in the pharmaceutical, cosmetic, food and industrial markets.

ALLTUB GROUP thrives to be the best partner in providing added value in **sustainable aluminium packaging solutions** both globally and locally, by relying on high quality standards and passionate employees.

ALLTUB GROUP has strong values:

- Respect
- Continuous improvement
- Walk the talk and be consistent
- Discipline
- Team-work
- Trust



Company vision & values : support for sustainable development

ALU

Alltub Group has set itself the rule of respecting the environment and promoting continuous improvement in environmental protection. Alltub Group is committed to sustainably upholding the goal of environmental protection for current and future generations<sup>\*</sup>.

The next decade will be critical in terms of **environmental challenges**. Decisions should be taken to limit global temperatures rise, to ensure clean air and water, stable climate and safe food for tomorrow.

As implementing sustainable solutions is a key driver, ALLTUB GROUP is continuously working on **finding better ways** to make its operations and products more efficient and environmentally friendly. **By respecting nature** and its exhaustible resources, by strongly believing that recyclable and recycled aluminium is key for the future in the packaging industry.

ALLTUB GROUP **continuously shapes the market**, challenges the industry, supports changes and trends, brings innovations to the customers.

Alltub Group is proud to measure the environmental impact and performance of its products and communicate in a transparent way for consumers and employees. The main goal of this EPD is **providing data for customers** who would like to publish their own EPD with Alltub Group products.

This EPD has been approved by the ALLTUB Group's Management Team.

\*source : Alltub Group Code of Conduct support for sustainable development (6)



#### **Product:** aluminium tube general information

Thanks to their **incredible properties and characteristics**, aluminium tubes can be used in many different sectors for a wide range of products and applications, and are the perfect choice for a wide range of packaging styles from vintage to trendy packaging.

Aluminium is a permanent material and can be recycled indefinitely.

Recycling or recycled contents is more than a trend it's a company commitment, especially today.

(Re)turning to aluminium is a **pertinent solution** for many brands and producers. Before the rise of plastics, most toothpastes, creams and ointments were packed in aluminium tubes. **Lightweight and malleable**, aluminium is popular with designers, and its natural, authentic image chimes with the current consumer climate.



## Product: aluminium tube general information

The collapsible aluminium tube is a tried and tested packing solution which has existed for many decades across all continents of the world.

The first squeezable metal tube was born in 1841 in America for paint. Beginning in 1886, attempts were made to fill aluminium tubes with contents other than paint such as toothpaste in 1887. The first attempts to use aluminium for the industrial production of tubes came in 1913. The first year with a high production rate was 1920, and thereafter the number rose greatly during the 1920s and 30s. In 1939, the aluminium tube celebrated its victory over the other materials used up until then.

After more than 175 years ago of history as a material for high-quality packaging, the aluminium tube is still a success story.

All industries today, whether they produce pharmaceuticals, cosmetics, paint or pasty chemicals for technical use, rely on the aluminium tube as the premium packaging for their precious products, and they will continue to do so in the future<sup>\*</sup>.

\*source: http://www.aluminium-tubes.org/history.html \*\*source: https://www.kilmerhouse.com



Historical picture not related to Alltub's products<sup>\*\*</sup>



## **Product: aluminium tube general information**

The key characteristics of the aluminium tube which have made it so popular over the years and with ever increasing popularity are the following:

- The typical characteristics of the material guarantee excellent resistance to the ingress of both air and light, preserving over time all the characteristics of the tube's content. Aluminium tubes can also be sterilized by autoclave or gamma radiation for example.
- The wide possibilities of forming the aluminium allow the creation of innovative dispensing systems, increasing the user experience of the tube as well as increasing the shelf life of the content.
- Reducing waste and saving food: using just the amount of product we need.

- Tubes are lightweight and can be customized whilst maintaining their recyclability in full after use.
- Custom printing with a wide variety of beautiful multi-colour print options.



## **Product description / Technical information**

TUBE	
Diameter mm	28
Lenghtmm	145
Material	Primary A7 Aluminium
Nozzle orifice	Closed with membrane
Shoulder	Brush-finished
Thread ISO std	M11
Internal varnish	Epoxy-phenolic
Enamel	Polyurethane resins
Inks	Polyester resins
Standard open end tube not enamelled mm	2
	Acrylic resins
Weight g	5,35*
САР	
Material	PP plastic
Thread ISO std	M11
Colour	Several colours
Weightg	0,80

The product complies with the requirements for "materials and articles intended to come into contact with food" (EU Framework Regulation (EC) No. 1935/2004 and Regulation (EC) No. 2023/2006)

\* Average tube's weight considered in the study





## **Process description**





#### **Content declaration: regulatory compliance**

The composition of the analyzed aluminium tube is: Aluminium 68%, Polymeric Coatings 22%, PP 10%.

The ALLTUB Group is a downstream user and manufacturer of articles, the collapsible aluminium tubes for the food, cosmetics, pharmaceutical and industrial market, in the meaning of the European chemical legislation REACH(Regulation (No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals).

We exclusively process at our European sites raw materials, which comply with the REACH Regulation including the CLP Regulation (EC) No 1272/2008 (labelling and packaging of substances and mixtures), and we fulfil all REACH obligations as applicable to packaging manufacturers. The CLP Regulation, based on the Globally Harmonized System GHS, does not apply to articles like aluminium collapsible tubes.

The ALLTUB Group strongly avoids using raw materials containing more than 0,1% by weight of Substances of Very High Concern SVHC published to the Candidate List for Authorisation according to Article 59(10) of REACH. However, we will fulfil the REACH obligations to submit relevant data to ECHA via the SCIP database and will inform our customers, if different.

ALLTUB's collapsible aluminium tubes comply with the following EU legislations:

- Packaging and Packaging Waste Directive 94 62 /EC PPWD and its amendments concerning the defined limits for heavy metals (Sum of Cd, Cr, Hg and Pb < 100 ppm)
- $\bullet$  Regulation ( 2019 1021 on persistent organic pollutants and its amendments concerning the restrictions on listed substances
- Regulation (No 1005 2009 on substances that deplete the ozone layer and itsamendments concerning therestrictions on listed substances

• ALLTUB's collapsible aluminium tubes don't contain VOCs, exempt technically unavoidable and negligible residuals of organic solvents at ppm levels, nor intentionally added phthalates.

Basically, all ALLTUB tubes for food, cosmetic, pharmaceutical and industrial applications are developed with raw materials compliant to the EU Framework Regulation (EC) No. 1935/2004 on materials and articles intended to come into contact with food and Regulation (EC) No. 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food.

Furthermore, requirements applying to specific groups of materials are or can be fulfilled as following:

• Virgin + PCR Aluminium:

EN 602

CoE Resolution CM/Res(2013)9 on metals and alloys used in food contact materials and articles.

• Plastic Materials:

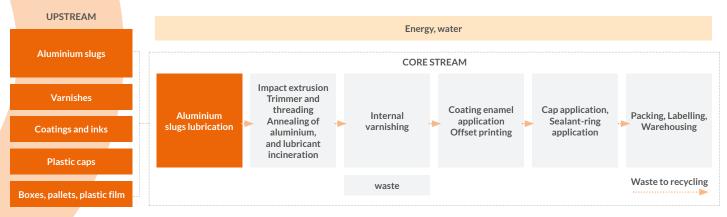
European Pharmacopeia monographs 3.1.3 (Polyolefins) and 3.1.5 (Polyethylene with additives for containers for parenteral preparations and for ophthalmic preparations) or 3.1.6 (Polypropylene for containers and closures for parenteral and ophthalmic preparations.

Colorants:

CoE Resolution AP (89) 1 on the use of colorants in plastic materials coming into contact with food.



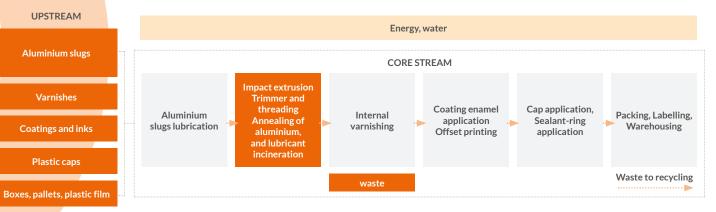
## System diagram of the processes included in the LCA, divided into the life cycle stages



**Aluminium slugs lubrication:** During the first phase of the core process, aluminium' slugs are lubricated into tumbling machines adding solid lubricant. This process facilitate the next production phase of impact extrusion. The lubricant is subsequently completely removed by sublimation into the annealing oven.



## System diagram of the processes included in the LCA, divided into the life cycle stages



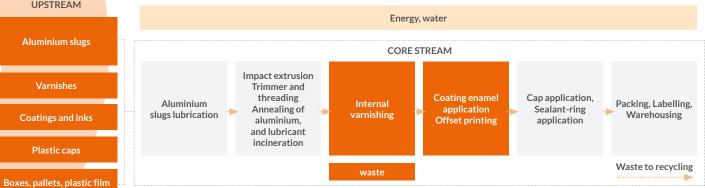
Impact extrusion: The slug is positioned in the die and hit by a mandrel; the aluminium, compressed between the mandrel and the matrix, forms the shoulder shape and flows back along the surface of the mandrel creating the cylind ical shape.

**Dimensional and threading operation:** The trimming machine removes the surplus to obtain the nominal tube length and it machines the thread on the nozzle. The aluminium scraps generated by these operations are eliminated and collected for recycling.

Annealing of aluminium: To give to the trimmed tube the requested mechanical properties and remove any residue of the lubricant, the tubes have to come into an annealing oven at a temperature above 300°C.



## System diagram of the processes included in the LCA, divided into the life cycle stages



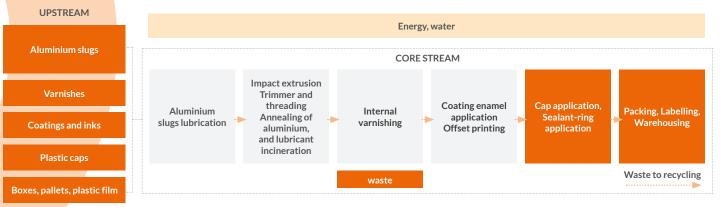
Internal varnishing: At the exit of the annealing oven the tube is coated internally by spraying with 2 or 3 passes. This is necessary to ensure the protection of aluminum to the chemical product contained therein. During the passage through the curing oven, generally at 280-300°C, the internal coating cures and becomes solid and homogeneous. The complete protection of the aluminum must be guaranteed by the thickness, the temperature of polymerization, fl xibility and uniformity of the internal film

Printing: The first phase of the printing process is the application of the enamel which consists of applying a coating on the external surface of the tube with a roller. The enamel can be transparent, white or colored, glossy or matt. The next step in the drying oven at a temperature between 120 and 140°C allows the partially cured enamel to improve the adhesion of the printing inks. The printing technology is indirect offset wet on wet. The ink, through a series of rubber and metal rollers, is uniformly distributed and transferred to the photopolymer plate. Then the colour is transferred, one by one, without drying, onto a printing blanket. The complete image is transferred from the blanket onto the tube. The enamel and inks are completely dry after passing in the curing oven at a temperature of 170°C.

#### **UPSTREAM**



#### System diagram of the processes included in the LCA, divided into the life cycle stages



Finishing: This phase consists into three operations:

- Plastic Cap application;
- Sealant-ring application near the open end of the tube;
- Packing and positioning of the tubes into boxes and then onto pallets, wrapped with stretch plastic film, suitable for t ansport and shipping.



#### LCA Methodology: other information

Geographical scope of the EPD: Global

**Decleared unit:** One aluminium tube with a plastic cap, at gate. The data reported relate to a product not yet on the market divided into the raw material supply (upstream processes) and the production phase, including cap application (core processes). The prevalent cap for the declared tubes is intended as standard and used for impact assessment.

Declaration of the year(s) covered by the data used for the LCA calculation: year 2022

Main database for generic data: Ecoinvent 3.9.1

LCA Software: Simapro 9.5

System boundary: "cradle to gate"

**Cut-off rules:** Data for elementary flows to and from the product system contributing to a minimum of 99% of the declared environmental impacts are included (not including processes that are explicitly outside the system boundary as described in Section 4.3 of the PCR).

**Excluded processes:** Production and transport of inks, production of rollers' rubber, transport of plastic cap, transport of aluminium ingot to slugs' production facility were excluded because under the cut-off.

**LCA modeling description:** Product environmental performance was assessed using the Life Cycle Assessment (LCA) method, from the extraction of the raw materials to the production of the finished product. The study was conducted in accordance with the ISO 14040 standard and the product category rules set forth in PCR 2019:13 Packaging (1.1), approved by the International EPD® System technical committee.

**Data Quality:** The data quality rules followed for this EPD are those defined in the relevant PCR. In accordance with such rules, both specific data gathered directly from the Aluminium Tubes production site during the year 2022 and generic data extracted from the commercial database (Ecoinvent 3.9.1) were used.



#### Sources and version of the characterization model used in the epd

- Acidification potential (mol H+ eq.) AP, accumulated exceedance, EN 15804. Version: August 2021
- **Eutrophication potential, aquatic freshwater (kg P eq.)** EP, aquatic freshwater, EUTREND model, EN 15804. Version: August 2021.
- **Eutrophication potential aquatic marine (kg N eq.)** EP, aquatic marine, EUTREND model EN 15804. Version: August 2021.
- Eutrophication potential terrestrial (mol N eq.) EP, terrestrial, accumulated exceedance, EN 15804. Version: August 2021.
- Global warming potential (kg CO2 eq.) GWP100, EN 15804. Version: August 2021.
- Photochemical oxidant formation potential (kg NMVOC eq.) POCP, LOTOS-EUROS as applied in ReCiPe, EN 15804. Version: August 2021.
- Ozone depletion potential (kg CFC 11 eq.) ODP, EN 15804. Version: August 2021.
- Water deprivation potential (WSF) (m3 H2O eq) AWARE Method: WULCA Characterization model for WSF 2015, 2017.
- Abiotic depletion potential for minerals and metals (kg Sb eq.) ADP minerals & metals, EN 15804. Version: August 2021
- Abiotic depletion potential for fossil resources (MJ) ADP fossil resources, EN 15804. Version: August 2021.



#### Environmental impacts: <u>28x145mm</u> tube, max filling capacity of 60ml, with standard opening

IMPACT CATEGORY		UNIT	UPSTREAM PROCESSES	CORE PROCESSES	TOTAL
	Fossil	kg CO <sub>2</sub> eq.	1,77E-01	6,12E-02	2,38E-01
	Biogenic	kg CO <sub>2</sub> eq.	-2,99E-04	5,62E-05	-2,42E-04
Global Warming Potential		$KgCO_2 eq.$	1,91E-03	5,83E-06	1,92E-03
	Total	Kg CO <sub>2</sub> eq.	1,78E-01	6,13E-02	2,40E-01
	Aquatic freshwater	Kg P eq.	9,57E-05	1,66E-05	1,12E-04
Eutrophication potential	Aquatic marine	Kg N eq.	1,97E-04	1,07E-04	3,04E-04
	Terrestrial	mol N eq.	1,93E-03	1,14E-03	3,07E-03
Acidification potential		mol H⁺ <b>eq.</b>	1,14E-03	3,65E-04	1,50E-03
Photochemical ozone creation	potential	Kg NMVOC eq.	5,98E-04	2,93E-04	8,90E-04
Ozone depletion potential		Kg CFC eq.	2,10E-09	1,13E-09	3,23E-09
Abiotic depletion potential for	r minerals and metals	Kg Sb eq.	2,21E-07	5,39E-08	2,75E-07
Abiotic depletion potential for	r fossil resources	MJ	2,06E+00	8,88E-01	2,95E+00
Water deprivation potential		m3 world eq. deprived	2,18E-02	5,90E-03	2,77E-02



#### Use of resources: <u>28x145mm</u> tube, max fill capacity of 60ml, with standard opening

IMPACT CATEGO	RY	UNIT	UPSTREAM PROCESSES	CORE PROCESSES	TOTAL
	Use as energy carrier	MJ, net calorific value	1,89E-01	4,99E-02	2,39E-01
Primary energy resources - Renewable	Use as raw materials	MJ, net calorific value	4,03E-02	0,00E+00	4,03E-02
	Total	MJ, net calorific value	2,29E-01	4,99E-02	2,79E-01
	Used as energy material	MJ, net calorific value	2,15E+00	9,59E-01	3,11E+00
Primary energy resources - Non renewable	Used as raw material	MJ, net calorific value	3,52E-02	0,00E+00	3,52E-02
	Total	MJ, net calorific value	2,19E+00	9,59E-01	3,15E+00
Secondary material		Kg	0,00E+00	0,00E+00	0,00E+00
		MJ, net calorific value	0,00E+00	0,00E+00	0,00E+00
Renewable secondary fuels		MJ, net calorific value	0,00E+00	0,00E+00	0,00E+00
		m³	1,44E-03	2,68E-04	1,71E-03



#### Waste production and output flows <u>28x145mm</u> tube, max fill capacity of 60ml, with standard opening

IMPACT CATEGORY	UNIT	UPSTREAM PROCESSES	CORE PROCESSES	TOTAL
Hazardous waste	kg	0,00E+00	0,00E+00	0,00E+00
Non-hazardous waste	kg	0,00E+00	0,00E+00	0,00E+00
Radioactive waste	kg	0,00E+00	0,00E+00	0,00E+00
IMPACT CATEGORY	UNIT	UPSTREAM PROCESSES	CORE PROCESSES	TOTAL
Components for reuse	kg	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	0,00E+00	2,92E-03	2,92E-03
Material for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00
Material for energy recovery Exported energy, eletricity	kg kg	0,00E+00 0,00E+00	0,00E+00 0,00E+00	0,00E+00 0,00E+00







Today, CSR (corporate and social responsibility) is an integral part of corporate operations and ALLTUB provides products to its customers compliant with our CSR approach.

In concrete terms, ALLTUB's commitment reflects the various policies implemented across companies to participate towards environmental protection, greenhouse gas emission reduction but also the improvement of product quality, social inclusion and economic development... If CSR was historically associated with environmental protection, today it also involves other areas whether economic, social, cultural or even educational.

The ALLTUB Group participates in the Ecovadis CSR programme (platform to assess social and environmental performance of global supply chains). Twenty-one criteria among 4 topics as follows (social, ethics, supply chain, environment) are assessed. In February 2024, ALLTUB France obtained a GOLD medal from Ecovadis.

In parallel of Ecovadis programme, ALLTUB GROUP also participates in the Carbon Disclosure Project (CDP) since 2014. The CDP organization encourages investors, businesses and cities to take action to build a truly sustainable economy, measuring and understanding their impact on the environment.

## ecovadis







#### ALLTUB GROUP associative environmental activities

ALLTUB Group contributes actively to promoting the increase in recycling of lightweight aluminum packaging.

In France, as a **member of the CELAA/Projet Metal Club** (Recycling and Lightweight Packaging Club), founded in 2009 by Nespresso and France Aluminium Recyclage.

In Europe, ALLTUB Group is an active member of the **ETMA (European Tube Manufacturers Association)** and has won the Tube of the Year prize in 2020 for one of its latest innovations: the Green Tube, made from >95% Post-Consumer Recycled aluminium.

In North America, as a member of **The Tube Council of North America** and has won in 2023 the **Gold Award as Best Sustainable Tube** for its tubes made from 100% recycled aluminium and with a 100% aluminium cap.



LUB DE L'EMBALLAG

european tube

manufacturers association

etma





#### ALLTUB GROUP Latest Awards

The World Packaging Organisation (WPO) has chosen ALLTUB as a WorldStar 2024 winner (category packaging materials and components) for the POREfessional tube produced by ALLTUB France for Benefit Cosmetics.

The key features of the tube are production using **>95% PCR aluminium**, the beautiful, brushed mat aluminium print finish, combined with a major global brand such as Benefit Cosmetics reverting back to using aluminium tubes.

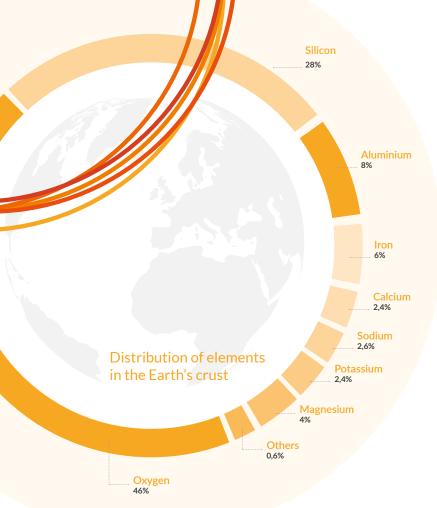
The WorldStar awards are the Champions League of packaging awards. You can only enter the competition if you have already won an industry award in your local country/continent. ALLTUB France won the **ETMA 2023 aluminium tube of the year** competition with the POREfessional tube, thus giving us access to enter the WorldStar awards.

The WorldStar judging process was conducted over two rounds and the judging panel was composed of 44 international esteemed judges, representing 45 WPO countries members from all around the world.

of THE YEAR **2023** 



WORLDSTAR





Additional information & references

#### Aluminium is everywhere

Aluminium is the third most abundant element in the Earth's crust; it accounts for as much as 8%, with oxygen accounting for 46% and silicon 28%. It means aluminium is the most abundant metal.

The source of aluminium is bauxite, which through the Bayer process is converted into alumina. In turn the alumina is converted into aluminium through electrolysis.

65 million tonnes\* of primary aluminium are produced every year. In addition, more than 30 million tonnes\*\* of recycled aluminium are produced from melted down aluminium scraps. The trend is upwards because the global demand for aluminium is increasing, the green tube is a perfect example of this trend!

Almost 75 per cent of the 1.5 billion tonnes of Aluminium ever produced is still in use today\*\*\*.

\*source: \*https://international-aluminium.org/statistics/primary-aluminium-production/

\*\*https://international-aluminium.org/work\_areas/recycling/

\*\*\*https://international-aluminium.org/work\_areas/recvcling/



## **Additional information & references**

	<b>EPD</b> <sup>®</sup>
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THE INTERNATIONAL EPD® SYSTEM

#### Environmental Product Declaration

In accordance with ISO 14025:2010

The international EPD® System **EPD** International AB Box 210 60 SE-100 31 Stockholm Sweden

www.environdec.com

info@environdec.com

Product category rules (PCR): PCR 2019:13 Packaging (1.1), UN CPC CODE 4293

PCR review was conducted by: The Technical Committee of the International EPD® System. Chair: Maurizio Fieschi. Contact via: info@environdec.com.

Independent third-party verification of the decla ation and data, according to ISO 14025:2006:

EPD process certification **FPD** verification

Third party verifier: SGS Italia SpA

In case of accredited certification bodies: Accredited by: ACCREDIA (Certificate nr. 0005VV)

Procedure for follow-up of data during EPD validity involves third party verifier: Yes V No

Contact person: Dr. Lewis Rigamonti - Email address: sustainability@alltub.com



https://www.mappinglca.com



Dr. Anna Bortoluzzi (QUOTA SETTE SRL)



#### ALLTUB GROUP SAS

Tour Pacific 11-13 Cours Valmy 92977 Paris La Défense Cedex FRANCE www.alltub.com

Dr. Lewis Rigamonti (ALLTUB GROUP)

ALITUB GROUP SAS has the sole ownership, liability and responsibility of the EPD

The environmental impacts of different EPDs can be compared only taking into account all the technical information supporting the declared/functional unit definition as requested by the PCR.

EPDs within the same ppduct category but from different programmes may not be comparable.