## Your reliable partner for APIs for over 60 years

**Guaranteed cleanliness and** 

During washing and anodisation, the quality

of ingredients and parameters is controlled by

computer. The handling of containers is also fully automated. During several years, evaluation of

the efficiency of the washing process has been performed and a log 3 (1/1000) efficiency factor

**Packing and palletisation** 

Each container is packed in a tight bag immediatly after washing and quality control.

Palletisation includes deep trays and PE film for the protection of the containers. Specific outer

packing solution can be proposed for severe

**Batch and Unit traceability** 

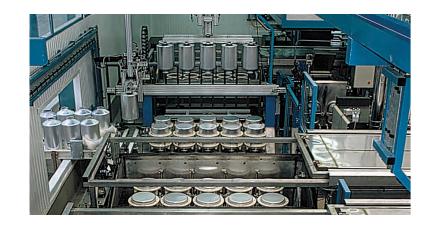
Batch and unit traceability are ensured through bar codes labels and ink jet printing or engraving

surface treatment

has been demonstrated.

logistic conditions.

on the containers.





#### Reliable supply chain

Raw material suppliers are regularly evaluated and provide a certificate of analysis for each delivery. They also must be able to accurately trace their production process.



#### **Quality standards**

Certified ISO 9001: 2008 and ISO 14001: 2004, Tournaire has passed many audits at GMP standards. Containers are also approved for the transportation of hazardous goods according to UN



#### **Quality control**

100% on-line inspection of dimensions and

# **TOURNAIRE:**

meet today's most demanding quality standards and are manufactured in accordance with the strictest





## Certified quality Tournaire products

specifications.



#### **DRUG MASTER FILE**

#### **SINCE 1833**

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## TOURNAIRE and APIs:

The ultimate protection for your active ingredients





#### TOURNAIRE Packaging: Major Partner for API containers since the 1950s

From streptomycin to last generations of cephalosporins, Tournaire has always provided state of the art containers for sterile or non sterile APIs. Our family owned company closely supports its clients with anticipation of new regulations (DMF), and mastership of modern techniques in the frame of the most demanding quality referentials.

#### **Key figures:**

- Over **180** years of experience.
- 240 staff in France.
- A **20000** m<sup>2</sup> plant.
- 5000 tons of materials transformed
- Over **50** millions € turnover.
- 65% Export worldwide through an international network of agents and distributors.
- 2 manufacturing sites.

#### Tournaire Equipment:



Tournaire Equipment Division designs and manufactures production units for pharmaceuticals, flavors & fragrances and fine chemicals in the field of extraction, evaporation, rectification, short path distillation, filtration, drying

and distillation. Its engineering department submits the technical files for their working and validation. Tournaire Equipment provides from pilot units to industrial plants compliant with ATEX and DESP rules.



## **TOURNAIRE** bottles:

Full range with type III DMF to help your registration



VOL.(L)	802	835	O 220
2,5	✓	✓	-
5,5 / 6,25	✓	✓	-
12,5	✓	-	✓
20	✓	✓	-
25	✓	-	✓
28,5 / 29,5	✓	✓	-
30 / 32	✓	-	✓

#### Safe and reliable protection

and protection

**Easy Sterilisation** 

/ Depyrogenation

Dry heat sterilisation allows in

one single step the sterilisation

AND depyrogenation of the

container. Furthermore, it

eliminates the presence of

moisture. Autoclaving can also

be used for sterilisation alone.

When tested before despatch,

to be pyrogen free.

**High resistance** 

are resistant to shocks,

Seamless aluminium containers

perforations, cuts, cold and

heat. They also give absolute

protection to light and gas

permeation.

our containers have been found

The European Pharmacopeia considers pure (min 99.5%) aluminium containers as safe and neutral for contact with Food and Drugs when produced and used according to GMP (Good manufacturing Practice).

#### **Specific Surface** treatment

Scouring and anodisation according to an approved process give a clean, smooth and resistant surface. Tournaire has worked closely with major pharmaceutical users over the years to standardise the best surface treatment, described in our DMF.



## **Efficient design** for user friendly solution

#### Seamless container

Each container is made of one disc of pure aluminium. Its whole surface is continuous, smooth and has no recesses nor

#### **Optimised** tightness

The calibration of the neck together with the elasticity of the rubber plug provides an hermetic seal, even with extreme variation of pressure.



Filling

large opening

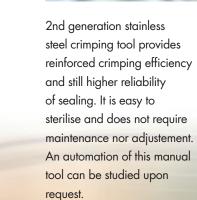
half rolled edge

rounded shape

#### Easy sealing and opening

Different closure systems are available, which provide user friendly sealing and opening as well as efficient tamper evident

#### Geometrical features



Sealing systems

### **Cap Opener**



Stainless steel cap opener allows to smoothly open the aluminium cap without touching it, thus avoiding the risk of contamination or cutting the glove.

#### **Tool for Inserting/** removing the plug



Connected with reduced vacuum source, the stainless steel removal/insertion tool allows to insert/remove the chlorobutyl plug easily (no rubbing nor effort) and avoids any contact with the plug (reduces risk of contamination).

#### TOURNAIRE WORKS for YOU by providing close regulatory support, but also accessories in addition to its container range. Various validated closing systems and accessories will bring smooth and reliable use for your comfort and safety.

#### Easy to use closing systems

-102mm opening with push-in -135 mm opening with push-in chlorobutyl plug chlorobutyl plug and aluminium cap reinforced by an aluminium disc and aluminium



-220mm opening with aluminium lid, nitrile ring wad and clamping ring.



#### Sample bottles



for sampling and stability tests: from 30cc to 275cc for 10 g to 100 g sampling.

