

General Notice

Impact of PET cans with aluminium tops

Although PET cans with aluminium tops are still rare on the French market, they have been growing in number since 2010. This packaging offers the advantage of showing its content.

COTREP would like to point out that the presence of aluminium significantly disrupts PET packaging recycling given the equipment and techniques currently used in Europe. For information, COTREP has studied the impact of any type of aluminium component associated with rigid PET packaging on recycling (AG01).

SORTING AND RECYCLING POTENTIAL

PET cans fall into the plastic bottle and container category and are therefore in the national sorting guidelines issued to the French population. In sorting centres, most PET cans with aluminium tops are channelled to PET recycling streams.

The table below indicates the impact of PET cans with aluminium tops on the PET reprocessing plant.

Recycling stage	Impact	Description	Consequences
Tri sur emballages		 1 aluminium element detected > Up to 5 aluminium-free PET packaging items ejected 	Increase in losses → Loss of material, increase in waste to be processed
Prélavage	Ø		
Crushing	Ø	Abrasive to the grinder blades	→ Equipment wear
Flottation		The aluminium particles are not eliminated and remain in the PET stream	PET stream pollution
Lavage	Ø		
<u>(optional)</u> paillettes		1 aluminium flake detected → Up to 1,000 PET flakes ejected	Increase in losses → Loss of material, increase in waste to be processed
Granulation (optional) Revolage		Presence of aluminium flakes: → Clogging of filters → Clogging of the die → Faults in appearance → Holes, etc.	Disruption of the process: → Increase in machine stoppages Quality defect: → Loss of material, increase in waste to be processed

Summary table of impacts during reprocessing



Ø: No impact **>** Environmental consequences