COmité
Technique de
Recyclage des
Emballages
Plastiques

GENERAL NOTICE
Technical Sheet

SUBJECT

Behaviour of an aluminium seal in recycling HDPE and PP plastic bottles.

IMPACT SUMMARY TABLE

Recycling stage	Impact	Description	Consequences
Sorting of bottles	⚠	1 bottle with aluminium seal detected, ➪ up to 5 bottles with no aluminium seal ejected.	• Higher losses ➢ **Increase in waste to be processed**
Grinding	Ø		
Washing	Ø		
Flake floating and separation	⚠	One particle of aluminium stuck to HDPE flake ➪ Aluminium remains in the HDPE stream Aluminium particles not stuck ➪ separation by flotation	Pollution of HDPE stream • Higher losses ➢ **Increase in waste to be processed**
Granulation (optional) and Recycling	⚠	Presence of aluminium particles: ➪ - Filters blocked - Channel blocked - Visual flaws - Holes, etc.	Process disruption - increase in machine stoppages - higher losses • Quality flaws ➢ **Increase in waste to be processed**

⚠ **Caution** Ø **No impact** ⌛ **Under examination** ➢ **Environmental consequences**

GENERAL OPINION

In the current state of equipment and techniques used and available in Europe, the presence of this closure system increases material losses in the recycling process.

In order to optimize recycling, COTREP recommends studying substitute systems that take inter-material compatibility into account and/or improvements to the seal's peel-off by consumers.

Work is in progress in the relevant trades and this notice is likely to evolve.