

How to improve the recyclability of

HDPE bottles

Bottle

Do: light weighting.

Don't: packaging that underperforms, so the product is lost. Packaging smaller than 5 cm in diameter, or larger than 5 L in volume.

Material and colour

Do: mono PE, use R-PE if possible.

Preferred: no colour or light colours.

Don't: use black colour, multi-layers and other interferences like silicone.

Adhesives

Do: water or alkali soluble in 60-80°C.

Difficult in recycling: hot-melts, self-adhesive labels.

Barrier

Only if there is no other solution: EVOH and PA.

Don't: PVDC, any additives that increase the density of HDPE.

Closures and caps

Do: all types of PE (HDPE, MDPE, LDPE, LLDPE), PE with EVA, PP.

Don't: metal, aluminium, PS, silicone components and PVC.

Labels, sleeves and tamper evidence

Do: as small as possible, sleeves should have partial bottle coverage to be recognised as HDPE.

Preferred: all types of PE (HDPE, MDPE, LDPE, LLDPE), PP and OPP.

Don't: PVC/PS/aluminium/metallised labels, paper labels. Don't use labels and sleeves bigger than 50% (with volumes less than 500ml), or 70% (with volumes more than 500 ml) of the packaging surface.

Inks and direct printing

Do: inks that are non-toxic and follow EUPIA guidelines.

Do: laser marked direct printing.

Avoid: any other direct printing (unless proven not to be an issue for the recycling process)

Secondary package

Do: fit for purpose, if the bottle is redesigned, check if the box needs an update too.

More information?

www.pack4recycling.be