

How to improve the recyclability of

Injection stretch blow moulded PET bottles

Bottle

Do: light weighting.
Use R-Pet if possible

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

Material

Do: mono PET (SPI code 1)
this can contain recycled content
(e.g. Post-consumer recycled content in a
middle layer).

Difficult in the recycling of PET:
PLA; PVC; PS and PET-G.

Adhesives

Do: water or alkali soluble in 60-80°C,
wash off self-adhesives.

Difficult in recycling: hot-melts, self-
adhesive labels (non-wash off).

Barrier

Do: avoid multi-layers.

Don't: EVOH, PA multilayer or coatings
such as SiOx plasma.

Caps

Do: material with a density of less than 1: PE and PP. This
makes separation easy. Using PET is not possible because
the cap will be difficult to unscrew.

Labels, sleeves and tamper evidence

Do: as small as possible; sleeves should have partial
bottle coverage to be recognised as PET.

Preferred: material with a density of less than 1: PP,
PE, OPP.

Not the best solution, but possible:, sleeves that are
translucent for Infrared detection in PE; PP; OPP;
EPS; foamed (floatable) PET or PET-G.

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 that
follow EUPIA guidelines.

Do: laser marked direct printing.

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

Colour

Preferred: transparent clear. Transparent light blue is
compatible with EPBP guidelines.

Difficult in recycling: other colours; opaque, black and
metallic bottles.

Secondary package

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

More information:

www.epbp.org

www.petcore-europe.org

TIP

Check the European PET Bottle Platform
design guidelines at

www.epbp.org/design-guidelines/products