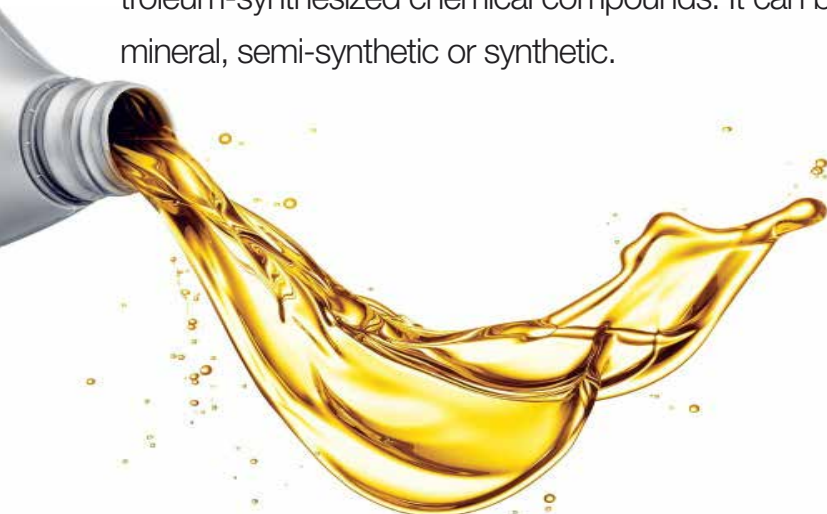


PET containers for Motor Oil

Product description

- Motor oil is an engine lubricant that is used for lubricating internal combustion engines or moving parts. The main function of these lubricants is to reduce wear on moving parts; they also clean, inhibit corrosion, improve sealing, and cool the engine by carrying heat away from moving parts.
- Motor oils are derived from petroleum-based and non-petroleum-synthesized chemical compounds. It can be either mineral, semi-synthetic or synthetic.



Target & requirements

The target was to replace commonly used HDPE containers with PET containers with similar shapes. Target PET containers' weight should be lower. Containers' main features should be: easy to handle and pouring easiness. Square or rectangular shapes are preferable to have a good arrangement in box or packed on pallet.

Development & challenges

Chemical compatibility between plastic PET and content has to be previously checked. Biggest challenge is to produce an asymmetrical bottle with oval shape, with or without an off-center neck. Also, rectangular profile and sharp edges have to be well designed and formed during blowing and particular attention has to be put in case of long neck or high/sloped shoulder during production process.

SFL with preferential heating or **ECS SP** Sipa machines are suggested for the manufacturing of these containers.

PET containers for Motor Oil

Results & Packaging Features

The new PET bottles were **10-15% lighter** than the HDPE containers.

Containers can be transparent or with opaque colours.



Weight: 100 g

Volume: 66 fl oz.

Dimensions:

- Height = 265mm

- Length = 130mm

- Width = 84mm

Neck Finish: 38mm

Advantages

This packaging gives you the following advantages:

- Conversion from other plastics: HDPE, PVC, etc;
- PET can be transparent or coloured, HDPE only opaque;
- Lighter and smoother/better flexibility than HDPE;
- More freedom on design/shape;
- Better aesthetics. Logos and engravings are more detailed with respect to HDPE;
- Better seal due to higher precision of neck/thread formation;
- Fully recyclable.

