

# Shell Ondina Oils (ISO)

## Medicinal white oils



Shell Ondina Oils are highly refined, non-additive, aromatic-free paraffinic white mineral oils complying with the stringent pharmacopoeia purity requirements. Ondina oils can be used in pharmaceutical, food packaging, cosmetic and other applications, where this high purity is required by legislation or important for the quality of the finished product.

---

### Applications

- **Cosmetic and Pharmaceuticals**  
Components in cosmetic creams, lotions, oils, toiletries etc.
- **Food packaging**  
Extender oil in polystyrene and other plastics, price labels.
- **Hygiene articles**  
Extender oil in thermoplastic TPE (e.g. SIS, SEPS), TPV and other elastomers.
- **Technical applications and car components**  
Carrier fluid and extender oil for a variety of high quality applications, where colour and stability is important. Suitable when PVC is replaced by TPE elastomers.
- **Toys and similar articles**  
Extender oil in TPE elastomers (e.g. SBS, SEBS)
- **Machinery lubrication**

The use of medicinal white oils in direct and indirect food applications, e.g. as food additives or for food packaging, is regulated by international specifications supplemented by local legislation. These requirements may deviate from country to country and must be taken into account by the user.

### Performance Features and Benefits

- **High purity**  
Refined to the highest degree of purity removing all aromatics; consist only of chemically inert n- and iso-paraffin molecules
- **Optimal quality control**  
Segregated product lines during production, storage, blending and filling; extensive laboratory control testing
- **Excellent stability**  
Exceeding oxidation and light stability of standard process oils

### Specification and Approvals

- European Pharmacopoeia 3<sup>rd</sup> Edition
- US Pharmacopoeia 29<sup>th</sup> and 30<sup>th</sup> Editions
- US FDA §172.878 ("White Mineral Oil") for direct food contact
- US FDA §178.3620(a) for indirect food contact
- FDA specifications, where above specified oils are positively listed e.g.  
§173.340,  
§175.105, §175.210, §175.230, §175.300,  
§176.170, §176.180, §176.200, §176.210,  
§177.1200, §177.2260, §177.2600, §177.2800,  
§178.3120, §178.3570, §178.3740, §178.3910,  
§573.680.
- UK 'The Mineral Hydrocarbon in Food Regulations 1966'

### Advice

Advice on applications not covered in this leaflet may be obtained from your Shell representative.

### Health and Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet which can be obtained from your Shell representative.

#### Protect the environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

## Typical Physical Characteristics

Ondina		15	32	46
ISO Viscosity grade	ISO 3448	15	32	46
Specifications		Light Liquid Paraffin	Light Liquid Paraffin	Liquid Paraffin
Europ.Pharmapoeia 3		Light Mineral Oil	Light Mineral Oil	Mineral Oil
US Pharmacopoeia 29, 30				
Colour (Saybolt)	ASTM D 156	+30	+30	+30
Density at 15 °C kg/m3	ISO 12185	850	865	865
Flashpoint COC °C	ISO 2592	180	210	210
Pour Point °C	ISO 3016	-12	-12	-12
Kinematic Viscosity	ISO 3104			
at 20 °C mm2/s				
at 40 °C mm2/s		15	32	46
at 100 °C mm2/s		3.3	5.1	6.5
Purity Requirements for Medicinal White Oils acc.		pass	pass	pass
Europ.Pharm. 3; US Pharm. 29, 30; US FDA §172.878, FDA §178.3620(a)				

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.