# SHELL ONDINA OILS

MEDICINAL WHITE OILS

DESIGNED TO MEET CHALLENGES

Shell Ondina Oils are highly refined, non-additive, aromatic-free paraffinic white mineral oils complying with the stringent pharmacopoeia purity requirements. Shell 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.

#### PERFORMANCE FEATURES

#### HIGH PURITY

n 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**

n Exceeding oxidation and light stability of standard process oils.

#### **APPLICATIONS**

# COSMETIC AND PHARMACEUTICALS

n Components in cosmetic creams, lotions, oils and toiletries.

#### **FOOD PACKAGING**

n 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

n 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

n The use of medicinal white oils in direct and indirect food applications. These requirements may deviate from country to country and must be taken into account by the user.

# SPECIFICATIONS, APPROVALS AND RECOMMENDATIONS

#### **EXCEEDS SPECIFICATIONS OF:**

- n European Pharmacopoeia 3 rd Edition
- n US Pharmacopoeia 29 thand 30 th Editions
- n US FDA §172.878 ('White Mineral Oil') for direct food contact
- n US FDA §178.3620(a) for indirect food contact
- n 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.
- n UK 'The Mineral Hydrocarbon in Food Regulations 1966'.

Purity Requirements for Medicinal White Oils acc. Europ. Pharm. 3; US Pharm. 23, 30; US FDA \$172.878, FDA \$178.3620(a)	Pass	Pass	Pass
US Pharmacopoeia 23	Light mineral oil	Light mineral oil	Mineral oil
Specifications: Europ Pharmaopoeia 3	Light Liquid Paraffin	Light Liquid Paraffin	Liquid Paraffin
Colour (Saybolt) (ASTM D 156)	+30	+30	+30
Pour Point °C (ISO 3016)	-12	-12	-12
Flash Point °C (COC) (ISO 2592)	180	210	210
Density @ 15°C kg/m <sup>3</sup> (ISO 12185)	850	865	865
Kinematic Viscosity @ 40°C mm ²/s @ 100°C mm ²/s	15 3.3	32 5.1	68 6.5
CHARACTERISTICS	15	32	68