INDUSTRY PROCESS OILS

# 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

 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**

n 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

n 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<sup>rd</sup> Edition
- n US Pharmacopoeia 29 <sup>th</sup> and 30 <sup>th</sup> 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'.

TYPICAL PHYSICAL CHARACTERISTICS			
CHARACTERISTICS	15	32	68
Kinematic Viscosity @ 40°C mm ²/s @ 100°C mm ²/s	15 3.3	32 5.1	68 6.5
Density @ 15°C kg/m ³ (ISO 12185)	850	865	865
Flash Point °C (COC) (ISO 2592)	180	210	210
Pour Point °C (ISO 3016)	-12	-12	-12
Colour (Saybolt) (ASTM D 156)	+30	+30	+30
Specifications: Europ Pharmaopoeia 3	Light Liquid Paraffin	Light Liquid Paraffin	Liquid Paraffin
US Pharmacopoeia 23	Light mineral oil	Light mineral oil	Mineral oil
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