Technical Data Sheet

Shell **Ondina Oil** *32*

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.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **High purity**
  Refined to the highest degree of purity removing all aromatics; consisting only of chemically inert 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.

Main 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.

Specifications, Approvals & Recommendations

- European Pharmacopoeia 3rd Edition
- US Pharmacopoeia 29th and 30th 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’

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties			Method	Shell Ondina Oil 32
ISO Viscosity Grade			ISO 3448	32
Specifications - Europ. Pharmacopoeia 3				Light Liquid Paraffin
Specifications - US Pharmacopoeia 23				Light Mineral Oil
Colour (Saybolt)			ASTM D156	+30
Density	@15°C	kg/m³	ISO 12185	865
Flashpoint (COC)		°C	ISO 2592	210
Pour Point		°C	ISO 3016	-12
Kinematic Viscosity	@40°C	mm²/s	ISO 3104	32
Kinematic Viscosity	@100°C	mm²/s	ISO 3104	5.1
Purity Requirements for Medicinal White Oils acc.Europ.Pharm.				Pass

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

Health, Safety & Environment

- **Health and Safety**

  Shell Ondina Oil 32 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

  Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

  Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from http://www.epc.shell.com/

- **Protect the Environment**

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

Additional Information

- **Advice**

  Advice on applications not covered here may be obtained from your Shell representative.