Technical Data Sheet

Shell **Ondina Oil *68***

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, food machinery lubrication, 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; consist only of chemically inert 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 10th Edition
- Japanese Pharmacopeia XVII
- US Pharmacopoeia 43rd Edition
- 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’
- Regulation (EC) 10/2011 and amendments for plastic materials coming into contact with foodstuffs

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

Typical Physical Characteristics

Properties			Method	Shell Ondina Oil 68
ISO Viscosity Grade			ISO 3448	68
Specifications - Europ. Pharmacopoeia				Liquid Paraffin
Specifications - US Pharmacopoeia				Mineral Oil
Colour (Saybolt)			ASTM D156	+30
Density	@15°C	kg/m³	ISO 12185	864
Flashpoint (COC)		°C	ISO 2592	240
Pour Point		°C	ISO 3016	-9
Kinematic Viscosity	@40°C	mm²/s	ISO 3104	68
Kinematic Viscosity	@100°C	mm²/s	ISO 3104	9.7
Molecular Weight		g/mol minimum	ASTM D2502	480
Hydrocarbon Content : With carbon number less than 25		% m/m maximum	ASTM D2887 mod	5

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 68 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 Safety Data Sheet, which can be obtained from https://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.