

Marcol 82

Medicinal grade White Oil

Product Description

Marcol 82 is a purified mixture of liquid saturated hydrocarbons. It is a colourless, transparent oily liquid and is essentially odourless and tasteless. It is obtained from petroleum through several refining stages, including an ultimate purification by catalytic hydrogenation.

Marcol 82 is manufactured to exceed the purity requirements of the Pharmacopoeias. Due to its superior chemical inertness, it demonstrates better colour and oxidative stability than most mineral and vegetable oils, when stored and used under controlled conditions.

ExxonMobil White Oils are produced and controlled according to the ExxonMobil Product Quality Management System, EN ISO 9000 or equivalent standard.

Applications

Marcol 82 can be used in a variety of food-related, cosmetic and pharmaceutical applications subject to the applicable laws and regulations in each country (*).

Cosmetics

Marcol 82 is widely used as a component of a great variety of cosmetic products: Emollients and moisturisers (cleansing oils and milks, body lotions and creams, suntan lotions and milk, make-up powders) Baby products (shampoos, baby oils, bath oils) Hair care products (hot oil treatments, gels, scalp pomades) Neutral and protective diluents for other cosmetic ingredients such as essential oils Other applications such as bath cubes, anti-perspirant and deodorant sticks.

Marcol 82 provides many practical advantages to the formulation specialist: Excellent skin compatibility, very low irritancy and no comedogenicity Very good balance between resistance to bacteria and final biodegradability, with minimal environmental impact.

Further information is available in our bulletin White oils for Cosmetics.

Pharmaceuticals

Marcol 82 offers a high level of safety, thanks to its high purity (absence of toxic polycyclic aromatics, heavy metals), the complete destruction of germs in the high temperature manufacturing process, and specific packaging and handling procedures.

Marcol 82 is an ingredient of pharmaceutical topical ointments and petroleum jellies. It can be used as a pelletiser aid, and in the manufacture of gelatine capsules.

(*) User must check compliance with applicable regulations. As an example, at the date of publication of this document, Marcol 82 can be used as a food additive in USA subject to applicable FDA regulation, while it cannot be used as a direct food additive in European Union Member States

Properties and Specifications

Marcol 82 meets the requirements of the following specifications:

- USA FDA, 21 CFR 172.878 and 21 CFR 178.3620(a), White Mineral Oil
- US Pharmacopeia/National Formulary, most recent edition, Light Mineral Oil
- National Sanitation Foundation (NSF), category H1, registration number 123208
- European Pharmacopoeia, most recent edition, Light Liquid Paraffin
- The Japan's Specifications and Standards for Food additives, Liquid Paraffin

CAS number: 8042-47-5

EINECS number: 232-455-8

INCI name (Europe): Paraffinum Liquidum

CTFA Dictionary name (USA): Mineral Oil

| Property | Test Method | Typical | Min | Max |
|---|-------------|-------------|------------------|------------------|
| Appearance | Visual | - | Clear and Bright | Clear and Bright |
| Odour | Olfactory | - | absent | absent |
| Color, Saybolt | ASTM D 156 | - | + 30 | |
| Kinematic Viscosity @ 40°C, mm ² /s | ASTM D 445 | - | 14.5 | 17.5 |
| Kinematic Viscosity @ 100°C, mm ² /s | ASTM D 445 | 3.7 | | |
| Dynamic Viscosity @ 20°C, mPa.s | Calculated | - | 27 | 37 |
| Density @ 15°C, kg/m ³ | ASTM D 4052 | - | 845 | 858 |
| Density @ 20°C, kg/m ³ | ASTM D 4052 | - | 842 | 855 |
| Pour Point, °C | ASTM D 97 | - | - | - 6 |
| Flash Point, °C | ASTM D 92 | - | 182 | - |
| Refractive Index, n _D ²⁰ | ASTM D 1218 | - | 1.464 | 1.470 |
| Carbon Type, % and Paraffinic / Naphthenic / Aromatic | ASTM D 2140 | 65 / 35 / 0 | - | - |

Typical values may vary within modest ranges and specifications may be subject to change.

Health and Safety

Detailed health and safety information for this product is provided in the Material Safety Data Sheet (MSDS), available upon request through your local sales representative or from www.ExxonMobil.com

Storage and Handling

Recommended storage and handling procedures for ExxonMobil white oil products are summarised in a separate bulletin available upon request through your local sales representative or from www.ExxonMobil.com



Further Information

ExxonMobil supplies a range of white oils, process oils, waxes, bitumen and a full range of other lubricants, fuels and chemical products worldwide. Please contact your local ExxonMobil representative, or contact us at www.ExxonMobil.com, for more information on other products

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