PURETOL[™]

White Mineral Oils – EUROPE



Purity You Can Count On

Introduction

As the largest white mineral oil producer in the world, Petro-Canada has significant experience in supplying large bulk white oil customers. Petro-Canada produces PURETOL White Mineral Oils from start to finish - from integrated feedstock processing to certified white oils. We deliver directly to our customers through our dedicated infrastructure and efficient distribution system.

Properties and Uses

Because of their high purity and unique properties, PURETOL White Mineral Oils find use in a wide variety of industries and applications including personal care products, cosmetics,

pharmaceuticals, food processing and plastics.

PURETOL White Mineral Oils are highly refined, colourless and odourless.

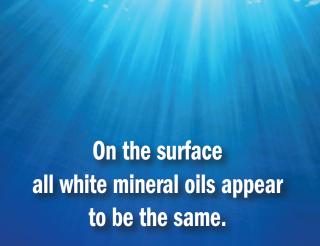
Credentials

- Our PURETOL line meets the requirements of the European Pharmacopoeia (EP)
- USP¹ and NF¹ grades meet FDA 21 CFR 172.878 and FDA 21 CFR 178.3620(a) requirements for direct and indirect food contact
- Select PURETOL grades are NSF¹ 3H and/or HX-1 registered and are available for use as components in various food applications
- All PURETOL grades available from our Dordrecht terminal are Kosher Pareve and Halal certified

¹ USP (U.S. Pharmacopeia; mineral oil), NF (National Formulary; light mineral oil), NSF (NSF International)

Experience

- Petro-Canada is the largest white oil producer in the world
- Over 30 years of experience producing base oils which are among the purest in the world
- Over 10 years of experience supplying large bulk white oil customers
- Fully integrated manufacturer feedstock through to finished product





Logistics

- Strategically located to deliver bulk shipments by rail, truck and marine globally to meet your needs
- · Dedicated white oil infrastructure and distribution system

Quality

- Tailored specific solutions to meet customers' needs through custom product development
- ISO 9001, ISO/TS 16949 registered quality system
- ISO 14001 registered environmental management system

A full range of PURETOL White Mineral Oils is available in a variety of grades to meet our customers' requirements.

TYPICAL PERFORMANCE DATA

	PURETOL GRADE						
Property	Test Method Product Code	PURETOL 9D PTL9D	PURETOL 11D PTL11D	PURETOL 22D PTL22D	PURETOL 350D PTLP35D	PURETOL 380D PTLP38D	PURETOL 550D PTLP55D
Density @ 15°C, kg/L	ASTM D4052	0.858	0.862	0.864	0.862	0.868	0.870
Kinematic Viscosity @ 40°C, cSt	ASTM D0445	15.5	21.4	43.2	71.5	74.0	102
Saybolt Viscosity @ 100°F, SUS	ASTM D2161	85	112	222	360	380	533
Colour, Saybolt	ASTM D0156	+30	+30	+30	+30	+30	+30
Pour Point, °C (°F)	ASTM D5950	-21 (-6)	-21 (-6)	-18 (0)	-15 (5)	-12 (10)	-12 (10)
Flash Point, COC, °C (°F)	ASTM D0092	>180 (356)	209 (408)	220 (428)	260 (500)	260 (500)	275 (527)
GC Distillation, °C , 5%	ASTM D2887	-	-	-	416	422	440

Other viscosity grades are available. In addition, Petro-Canada offers a full range of North American credentialed White Mineral Oils. Consult your Sales Manager.

Plastics & Elastomers



High viscosity PURETOL grades deliver low volatility and consistent quality. Ideal as internal and external lubricants in polystyrene, PVC*,

polyolefins and thermoplastic elastomers, they can improve and control melt flow behaviour. Offering high purity, excellent stability and a colourless nature, PURETOL can be used as a plasticizer, catalyst carrier and pigment dispersant.

*Patented replacement for paraffin wax in PVC pipe extrusion (Canadian Patent #2416268; US Patent #6,663,931)

Pharmaceuticals



With their unique properties, PURETOL White Mineral Oils may be used in many pharmaceutical applications: capsule lubricants, pelletizing aids and ointment bases. Meets EP, USP and NF requirements.

Health & Beauty



PURETOL White Mineral Oils provide effective bases for personal care and cosmetics products where they are used to lubricate, soften, smooth, moisturize, and add emolliency. Uses range from

baby oil, skin lotions and sunscreen to hair care products, lipstick and makeup.



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Additional Markets



PURETOL White Mineral Oils, with their unique properties, are ingredients of choice in many additional industries and applications. Textile fibre lubricants, cleaners and polishes, and leather processing are just a few.

Adhesives



PURETOL White Mineral Oils can also be utilized in hot melt and pressure sensitive adhesive technology where they can be used as plasticizers.

Food & Agriculture



Select PURETOL White Mineral Oils meet NSF 3H requirements. PURETOL White Mineral Oils are also Kosher Pareve and Halal. Uses include:

protective coatings on fruits and vegetables, defoamers and meat packing. The same product attributes - high purity and odourless - that allow PURETOL to be used in the food industry also make it a welcome part of the agricultural segment. Primary applications include dust suppression in grain silos and animal feed.

To place an order, please call a Customer Order Management Representative at:

Europe Phone 00-800-7387-6000

You can also e-mail us at lubecsr@suncor.com

To learn more about how Petro-Canada lubricants, specialty fluids, oils and greases can help maximize your equipment performance, savings and productivity, please contact us at:

Europe	Phone	+44 (0) 121-781-7264
Germany	Phone	+49 (0) 201-726-2913

Visit us on the web at puretol.eu



