

Foots oil (petroleum)

Product Stewardship Summary

CAS number:

64742-67-2

Chemical formula:

Not applicable, most petroleum industry substances are Substances of Unknown or Variable composition, Complex reaction products or Biological materials (UVCB).

What is Foots oil (petroleum)?

They are paraffinic waxes with a low aromatic content, good oxidation stability and high viscosity/temperature behaviour. They are manufactured from slackwax.

How is Foots oil (petroleum) used?

Uses include petroleum jelly and raw material, which is further refined for a number of wax applications. For both applications the product is treated with coal and bleaching earth or via hydro treatment.

Health, Safety and Environmental considerations

Foots oil (petroleum) is solid at room temperature and starts to melt at temperatures above 40 – 60 °C. It has a typical flashpoint of about 250 °C and an initial boiling point of above 280 °C. It is not flammable according to UN GHS criteria, but will burn. It is neither self-reactive, nor self-heating and does not undergo exothermic decomposition when heated.

Due to potential reactions with oxidizing materials Foots oil (petroleum) should be stored separately. The recommended storage temperature should not exceed 50 °C.

Foots oil (petroleum) is of low toxicity when inhaled, swallowed or in contact with skin in laboratory animals. No irritation of skin or eyes has been observed and there is no evidence of allergic skin reaction or respiratory sensitization from animal studies. However, slight irritation of the skin, dryness or cracking after repeated dermal exposure may occur. If skin is not properly cleaned, pores may be clogged and result in oil acne or folliculitis. Inhalation of oil vapours or mists may cause respiratory irritation, when working with hot product. In that situation, an occupational exposure limit (OEL) for oil mists at the workplace of 5 mg/m³ based on the recommendation of the American Congress of Governmental Hygienists (ACGIH) should not be exceeded. Appropriate personal protection equipment as well as procedures for safe handling and risk management controls as described in the current Shell Lubricant Safety Data Sheet should be applied.

Kinematic viscosities of this material can only be measured at elevated temperatures, for example 100 °C. Therefore, it does not pose an aspiration hazard.

It can be concluded from extensive studies on the mutagenic potential of foots oil (petroleum) that it is not considered to be a germ cell mutagen. It is also not expected to be carcinogenic following the investigation of long-term dermal exposure of laboratory animals. There is no evidence of developmental and reproductive toxicity.

Based on the above this material is not classified according to UN GHS criteria¹⁾.

The product is poorly soluble in water and will float on water. Therefore, tests on short- and long-term aquatic toxicity with fish, invertebrates and algae were carried out on water accommodated fractions and led to the conclusion that these base oils are practically non-toxic.

Foots oils (petroleum) are UVCB substances (see explanation under "Chemical formula"). Based on the available compositional information, measured and predicted data it can be concluded that the major constituents are inherently biodegradable and have a bio-accumulation potential.

Following UN GHS criteria, foots oil (petroleum) is not classified for environmental hazards.

This material is solid or semi-solid under normal conditions at room temperature and if it enters soil it will quickly adsorb to soil particles, be of low or no mobility and not contaminate ground water.

The health, safety and environmental considerations above are not applicable for used oil, as this may contain more hazardous substances present as a consequence of different applications of this base oil, for which specific additives or other substances may have been introduced.

Storing and transporting foots oil (petroleum)

Foots oil (petroleum) is mainly transported by road and rail.

The temperature during storage and transportation should not exceed 50°C.

Precautionary measures against static discharges must be undertaken during loading and unloading and all operators must wear personal protective equipment.

Storage tanks should be made from mild steel.

Risk Characterization Summary

Risks associated with exposure to these products have been evaluated for the following "chain-of-commerce" activities: manufacture, storage, product transfer, transportation, and customers / markets. They are manufactured, stored and transported to customers in closed systems. Product is considered to pose low risk in all applications due to the non-hazardous nature of the product.

This product stewardship summary is intended to give general information about the chemical or categories of chemicals addressed. It is not intended to provide an in-depth discussion of health and safety information. Additional information is available through the chemical's applicable [Safety Data Sheet](#), which should be consulted before use of the chemical. This product stewardship summary does not supplant or replace required regulatory and/or legal communication documents.

Shell Process Oils linked to CAS number 64742-67-2:

- Footsoil
- Footsoil (Mix)



Disclaimer

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1) The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London.