

Hydrocarbon waxes (petroleum), hydrotreated microcrystalline

Product Stewardship Summary

CAS number:

64742-60-5

Chemical formula:

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

What are Hydrocarbon waxes (petroleum), hydrotreated microcrystalline?

These hydrogenated high-quality microwaxes are derived from the residues of the vacuum distillation of crude oil.

How are Hydrocarbon waxes (petroleum), hydrotreated microcrystalline used?

These microwaxes have very efficient oil-binding properties and are suitable for use in cosmetic or Vaseline production, for use in food or direct food contact and hot-melt adhesives.

Health, Safety and Environmental considerations

Hydrocarbon waxes (petroleum), hydrotreated microcrystalline have a flashpoint and initial boiling point above 280 °C. They are not flammable according to UN GHS criteria, but will burn. They are neither self-reactive, nor self-heating and do not undergo exothermic decomposition when heated. They are semi-solid at room temperature and are stored at 75 – 100 °C under a Nitrogen blanket. This material has the potential to be a static accumulator. Therefore proper grounding and bonding procedures should be used during all bulk transfer operations.

Hydrocarbon waxes (petroleum), hydrotreated microcrystalline are 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. Inhalation of vapours or mists may cause respiratory irritation. 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.

The kinematic viscosity at room temperature up to 40°C is high and microwaxes are therefore not considered an aspiration hazard.

These microwaxes are not expected to be germ cell mutagens, to cause cancer and there no

evidence of developmental and reproductive toxicity.

Based on the above hydrocarbon waxes (petroleum), hydrotreated microcrystalline are not classified for health hazards following UN GHS criteria.

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.

Hydrocarbon waxes (petroleum), hydrotreated microcrystalline are UVCB substances (see explanation under "Chemical formula"). Based on the physico-chemical data and available information from similar substances an adverse effect on the environment is not expected. However, the presence of minor constituents with a certain environmental persistence, inherent biodegradability or a bio-accumulation potential cannot be excluded.

Following UN GHS criteria, microwaxes are not classified for environmental hazards.

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

Storing and transporting Hydrocarbon waxes (petroleum), hydrotreated microcrystalline

Hydrocarbon waxes (petroleum) hydrotreated microcrystalline are mainly transported by road and rail.

The temperature during storage and transport should be kept between 75 – 100 °C. For containers or container linings use mild steel or high density polyethylene.

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

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 64742-60-5:

- Microwax LMP
- Microwax HMP



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