



## MSDS

**trade name:** Marfak Multipurpose 2  
**product code:** 510818  
**supplier:** Chevron Lubricants Vietnam Limited  
Hanoi Branch  
5th Floor - Horison Offices  
40 - Cat Linh  
Hanoi  
Vietnam  
**routine inquiries:** +84-4-37332545  
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**chemical description:** Grease

<b>components</b>	<b>cas no.</b>	<b>range in %</b>
Solvent dewaxed heavy paraffinic distillate	64742650	> 75
Solvent deasphalted residual oil	64741953	< 20
Additives which may include thickeners, antioxidants, rust inhibitors, extreme pressure agents, demulsifiers, tackifiers, antifoam agent, and corrosion inhibitors	Not Available	< 10
Lithium hydroxystearate	7620771	< 8

**warning statements:** HANDLE MATERIAL IN PRESSURE EQUIPMENT WITH CARE.  
ACCIDENTAL INJECTION CAN CAUSE SERIOUS TISSUE DAMAGE.

**eyes:** Expected to cause no more than minor eye irritation characterized by tearing or a burning sensation.

**oral:** If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur.

**inhalation:** When overheated, product may release H<sub>2</sub>S gas. Trace amounts may cause an odor. In the unlikely event of conditions causing the accumulation of hazardous levels of H<sub>2</sub>S, exposure may result in irritation of the eyes and respiratory tract, headache, dizziness, nausea, vomiting, and diarrhea. At concentrations above 300 ppm, respiratory paralysis, causing unconsciousness and death, can occur.

Product not volatile at ambient temperatures. Vapours, mist, or fumes in high concentrations, as generated from spraying or heating in an enclosed space, may cause irritation.

**skin:** Brief contact may cause slight irritation. Prolonged contact may cause more severe irritation and discomfort, seen as local redness and swelling.

**long term toxic effects:** The base oil component(s) are not expected to be carcinogenic based on IARC criteria. This product has not been tested as a whole for chronic health effects.

See Section 11 for additional information.

**eyes:** Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open.

If irritation persists, see a doctor.

**skin:** Wash skin thoroughly with soap and water.

If skin irritation persists or a rash develops as a result of excessive contact, see a doctor.

**ingestion:** If swallowed and person is conscious, give water or milk. DO NOT make person vomit except on advice of medical personnel. If advice cannot be obtained, take person with container and label to nearest emergency treatment center. Never give anything by mouth to an unconscious person.

**inhalation:** This material is not expected to be an acute inhalation problem under typical applications. However, if exposed to excessive levels of fumes, mists, or dusts, remove to fresh air and get medical attention.

**advice to doctor:** High-pressure equipment can cause small, often bloodless, puncture wounds where material may have been injected deep into the extremity. Within 24 hours, there is usually extensive swelling, discoloration and

intense pain in the affected part. Requires immediate treatment at a surgical emergency centre; else disfigurement or amputation of the affected part may occur.

Treatment of high pressure wounds may include: 1) surgical decompression, debridement, and drainage. 2) broad-spectrum antibiotic and 3) anti-inflammatory medication. See Shoo, M.J., et al. High pressure injection injuries of the hand. J. Trauma, 20:229-238, 1980.

<b>ignition temp. (degrees c):</b>	Not Determined
<b>flammable limits (% by volume):</b>	Not Determined
<b>flash point (degrees c):</b>	Not Determined
<b>fire extinguishing agents:</b>	According to the U.S. National Fire Protection Association Guide, use water fog, dry chemical, foam, or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapours and to provide protection for persons attempting to stop the leak.
<b>explosion hazards:</b>	For fires involving this material, do not enter any enclosed or confined space without self-contained breathing apparatus to protect against the hazardous effects of combustion products or oxygen deficiency.  Hydrogen sulfide (H <sub>2</sub> S) may be released when heated.
<b>in case of spill:</b>	Shovel up material and place in disposable container, observing precautions outlined in this MSDS. Scrub contaminated area with detergent and water using stiff broom or mop. Pick up liquid with an absorbent and place in a disposable container. Avoid eye and skin contact. Prevent contamination of groundwater or surface water.

Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimised. Water contamination should be avoided.

Under extreme temperatures or extended storage periods, hydrogen sulfide gas may accumulate in the head-space of container.

Misuse of empty containers can be hazardous. DO NOT cut, weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

<b>eyes:</b>	Avoid eye contact. The wearing of chemical safety goggles or face shield is recommended.
<b>skin:</b>	Exposed employees should exercise reasonable personal cleanliness; this includes cleansing exposed skin several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.
<b>inhalation:</b>	None required when handling at minimum feasible temperatures.
<b>ventilation:</b>	Under normal applications of this product, general dilution ventilation is adequate.
<b>exposure limits:</b>	The ACGIH TLV for mineral oil mists is 5 mg/m <sup>3</sup> for a daily 8-hour exposure. A short term exposure limit (STEL) of 10 mg/m <sup>3</sup> is recommended.  None established for product.

**note:** The following data may represent a range of approximate or typical values for products in the same family. Precise technical information is provided in Product Bulletins and can be obtained from your Marketing Representative.

<b>appearance &amp; odor:</b>	Brown semi-solid
<b>boiling point (deg. c):</b>	Not Determined
<b>vapor pr. (mmhg @ 25 deg. c):</b>	Low
<b>density (kg/l at 15 deg. c):</b>	0.95
<b>vapor density (air = 1):</b>	Not Determined
<b>ph of undiluted product:</b>	Not Applicable
<b>solubility (water):</b>	Negligible
<b>percent volatile by volume:</b>	Not Determined
<b>evaporation:</b>	Not Determined
<b>viscosity (all product grades):</b>	Not Determined

**hazardous polymerizations:** DO NOT OCCUR

**products of combustion:** Carbon monoxide, carbon dioxide, and aldehydes and ketones, combustion products of nitrogen or sulfur.  
Metal combustion products (oxides and/or sulfides) may be released.

**conditions to avoid:** Heat, Strong Oxidizers

**general:** This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, hydrocracking and hydrotreating. These oils have not been listed in the U.S. National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as carcinogenic or probably carcinogenic to humans.

High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part. Take this information with you if you seek medical treatment.

**environmental effects:** This product is expected to have low aquatic toxicity (LD50 > 1000 mg/l) and is not considered to represent a long-term danger to the aquatic environment.

**waste disposal:** Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

**remarks:** None Determined.

**transport of dangerous goods:**

**UN Number:** Not Applicable

<b>Dangerous Goods Class:</b>	Not Applicable
<b>Proper Shipping Name:</b>	Not Applicable
<b>Hazchem Code (Australia/NZ):</b>	Not Applicable
<b>Additional Information:</b>	None Determined.

**respirator information:** None determined.

No specific notes on this product.

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Approved HES Services  
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