# SAFETY DATA SHEET

MOBIL ALMO 525

ExxonMobil

## Section 1. Identification

**Product name** : MOBIL ALMO 525

**Product description** : base oil and additives

**Relevant identified uses of the substance or mixture and uses advised against**

**Identified uses** : Lubricant

**Uses advised against** : This product is not recommended for any industrial, professional or consumer use other than the identified uses above.

**Supplier** : EXXON MOBIL CORPORATION
22777 Springwoods Village Parkway
Spring, TX 77389 USA

**24-Hour emergency telephone number** : 1-800-424-9300 / +1 703-741-5970 / +1-703-527-3887 (CHEMTREC)

**Product Technical Information** : 800-662-4525

**SDS Internet Address** : www.sds.exxonmobil.com

## Section 2. Hazards identification

**OSHA/HCS status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture** : Not classified.

**Hazards not otherwise classified** : None known.

**Note** : This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

| Ingredient name | % by weight | Identifiers |
|---|---|---|
| amines, c12-14-tert-alkyl | ≤0.3 | CAS: 68955-53-3 |
| benzene sulfonic acids, c10-16 alkyl derivs., ca salts | ≤0.3 | CAS: 68584-23-6 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First aid measures

## Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

**Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : Local necrosis as evidenced by delayed onset of pain and tissue damage a few hours after injection.

**Ingestion** : No specific data.

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

## Extinguishing media

**Suitable extinguishing media** : Use dry chemical, $CO_2$, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous combustion products** : Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, sulfur oxides

# Section 5. Fire-fighting measures

**Special protective actions for fire-fighters** : Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Assure an extended cooling down period to prevent re-ignition. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

## NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

## Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Confine the spill immediately with booms. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants. Warn other shipping. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8).

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

# Section 7. Handling and storage

**Static Accumulator** : This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| solvent dewaxed heavy paraffinic distillate | **NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]**<br>TWA 10 hours: 5 mg/m³. Form: Mist.<br>STEL 15 minutes: 10 mg/m³. Form: Mist.<br>**OSHA PEL (United States, 5/2018) [Oil mist, mineral]**<br>TWA 8 hours: 5 mg/m³.<br>**ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined]**<br>TWA 8 hours: 5 mg/m³. Form: Inhalable fraction. |
| amines, c12-14-tert-alkyl | None. |
| benzene sulfonic acids, c10-16 alkyl derivs., ca salts | None. |

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

## Section 8. Exposure controls/personal protection

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties and safety characteristics

**Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**Appearance**

**Physical state** : Liquid.

**Color** : Brown

**Odor** : Characteristic

**Odor threshold** : Not available.

**pH** : Not applicable.

**Melting point/freezing point** : Not available.

**Boiling point or initial boiling point and boiling range** : >315.56°C (>600°F)

**Flash point** : Open cup: >160°C (>320°F) [ASTM D-92]

**Evaporation rate** : Not available.

**Flammability** : Ignitable

**Lower and upper explosion limit/flammability limit** : Lower: 0.9%
Upper: 7%

**Vapor pressure** : <0.1 mm Hg [20 °C]

**Relative vapor density** : >2 [Air = 1]

**Relative density** : 0.876 [ASTM D4052]

**Solubility in water** : Negligible

**Partition coefficient: n-octanol/water** : >3.5

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

**Viscosity** : 46 cSt [40 °C] [ASTM D 445]

**Particle characteristics**

**Median particle size** : Not applicable.

**Pour point** : -27°C [ASTM D97]

**DMSO Extract (mineral oil only), IP-346** : <3 % by weight

# Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : High energy sources of ignition. Excessive heat.

**Incompatible materials** : Strong oxidizers

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Test | Species | Result | Duration |
|---|---|---|---|---|
| amines, c12-14-tert-alkyl | LC50 Inhalation Vapor<br>LD50 Dermal<br>LD50 Oral | Rat<br>Rat<br>Rat | 1.19 mg/l<br>251 mg/kg<br>612 mg/kg | 4 hours<br>-<br>- |

**Conclusion/Summary**

**Inhalation** : Minimally Toxic. No end point data for material. Based on assessment of the components.

**Dermal** : Minimally Toxic. No end point data for material. Based on assessment of the components.

**Oral** : Minimally Toxic. No end point data for material. Based on assessment of the components.

### Irritation/Corrosion

**Conclusion/Summary**

**Skin** : Negligible irritation to skin at ambient temperatures. No end point data for material. Based on assessment of the components.

**Eyes** : May cause mild, short-lasting discomfort to eyes. No end point data for material. Based on assessment of the components.

**Respiratory** : Negligible hazard at ambient/normal handling temperatures. No end point data for material. Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.

### Respiratory or skin sensitization

**Conclusion/Summary**

**Skin** : Not expected to be a skin sensitizer. No end point data for material. Based on assessment of the components.

**Respiratory** : Not expected to be a respiratory sensitizer. No end point data for material.

### Mutagenicity

**Conclusion/Summary** : Not expected to be a germ cell mutagen. No end point data for material. Based on assessment of the components.

### Carcinogenicity

**Conclusion/Summary** : Not expected to cause cancer. No end point data for material. Based on assessment of the components.

### Reproductive toxicity

**Conclusion/Summary** : Not expected to be a reproductive toxicant. No end point data for material. Based on assessment of the components.

### Specific target organ toxicity (single exposure)

# Section 11. Toxicological information

**Conclusion/Summary** : Not expected to cause organ damage from a single exposure. No end point data for material.

**Specific target organ toxicity (repeated exposure)**

| Product/ingredient name | Category | Target organs |
|---|---|---|
| MOBIL ALMO 525 | Not applicable. | - |

**Conclusion/Summary** : Not expected to cause organ damage from prolonged or repeated exposure. No end point data for material. Based on assessment of the components.

**Aspiration hazard**

**Conclusion/Summary** : Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. Data available.

**Other information**

**Contains** : Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

# Section 12. Ecological information

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

**Toxicity**

**Conclusion/Summary**

**Acute toxicity** : Not expected to be harmful to aquatic organisms.

**Chronic toxicity** : Not expected to demonstrate chronic toxicity to aquatic organisms.

**Persistence and degradability**

**Biodegradability** : Base oil component -- Expected to be inherently biodegradable

**Bioaccumulative potential**

**Conclusion/Summary** : Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

**Mobility in soil**

**Mobility** : Base oil component -- Expected to partition to sediment and wastewater solids. Low solubility and floats and is expected to migrate from water to the land.

**Other ecological information**

**Other adverse effects** : No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY

## Section 13. Disposal considerations

EXPLODE AND CAUSE INJURY OR DEATH.

## Section 14. Transport information

| | DOT Classification | TDG Classification | IMDG | IATA |
|---|---|---|---|---|
| **UN number** | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| **UN proper shipping name** | - | - | - | - |
| **Transport hazard class(es)** | - | - | - | - |
| **Label(s) / Marks** | | | | |
| **Packing group** | - | - | - | - |
| **Environmental hazards** | No. | No. | No. | No. |

**Additional information**

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not applicable.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 4(a) proposed test rules**: alkyl phosphonate; 1h-benzotriazole, methyl-

**TSCA 8(a) PAIR**: bis(2-ethylhexyl) hydrogen phosphate; 2-ethylhexyl dihydrogen phosphate

**TSCA 8(a) CDR Exempt/Partial exemption**: At least one component is not listed.

**Clean Water Act (CWA) 307**: phenol

**Clean Water Act (CWA) 311**: phosphoric acid; phenol; propylene oxide

**TSCA 12(b) - Chemical export notification**

Not applicable.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

# Section 15. Regulatory information

| Name | % | EHS | SARA 302 TPQ (lbs) | SARA 302 TPQ (gallons) | SARA 304 RQ (lbs) | SARA 304 RQ (gallons) |
|---|---|---|---|---|---|---|
| phenol | <0.1 | Yes. | 500 / 10000 | - | 1000 | - |
| propylene oxide | <0.1 | Yes. | 10000 | 1444.3 | 100 | 14.4 |
| ethylene oxide | <0.1 | Yes. | 1000 | - | 10 | - |

**SARA 304 RQ** : 222133368.9 lbs / 100848549.5 kg [30412520.8 gal / 115123914.9 L]

**SARA 311/312**

**Classification** : Not applicable.

**SARA 313**

This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

**State regulations**

**Massachusetts** : The following components are listed: OIL MIST, MINERAL

**New York** : None of the components are listed.

**New Jersey** : None of the components are listed.

**Pennsylvania** : None of the components are listed.

**Illinois** : None of the components are listed.

**Inventory list**

**Australia inventory (AIIC)** : All components are listed or exempted.

**Canada inventory (DSL-NDSL)** : At least one component is not listed.

**China inventory (IECSC)** : Not determined.

**Japan inventory (CSCL)** : At least one component is not listed.

**Japan inventory (Industrial Safety and Health Act)** : All components are listed or exempted.

**New Zealand Inventory of Chemicals (NZIoC)** : All components are listed or exempted.

**Philippines inventory (PICCS)** : All components are listed or exempted.

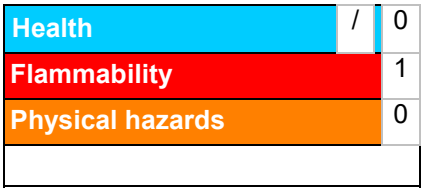
**Korea inventory (KECI)** : At least one component is not listed.

**Taiwan Chemical Substances Inventory (TCSI)** : All components are listed or exempted.

**United States inventory (TSCA 8b)** : All components are active or exempted.

# Section 16. Other information

**Hazardous Material Information System (U.S.A.)**

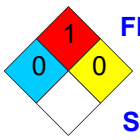



**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.**

**The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.**

**National Fire Protection Association (U.S.A.)**

# Section 16. Other information




Flammability

Health

Instability

Special hazards

## Procedure used to derive the classification

Not classified.

## New Jersey Right to Know Disclosure

| Name | CAS # |
|---|---|
| **Petroleum Oil (Lubricant)** | |

## History

**Date of issue/Date of revision** : 16 August 2024

**Date of previous issue** : 16 July 2024

**Version** : 1.02

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

**References** : Not available.

**Indicates information that has changed from previously issued version.**

**Product code** : 201560B08020_1162326

## Notice to reader

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