



502 Premium Engine Oil Improver

SDS Revision Date: 26/10/2021

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity 502 Premium Engine Oil Improver
Alternate Names 502
Unique Formula Identifier

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name: Southwestern Petroleum Lubricants LLC
3401 Quorum Drive Suite 360
Fort Worth, Texas 76137

Customer Service: : 800-433-5735

1.4. Emergency telephone number

Emergency: 734-930-0009

Section 2. Hazard identification of the product

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Carc. 1B;H350 May cause cancer.

2.2. Label elements

According to REGULATION (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006



Danger

H350 May cause cancer.

[Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P281 Use personal protective equipment as required.

[Response]:

P308+313 IF exposed or concerned: Get medical advice or attention.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents or container in accordance with local and national regulations.

2.3. Other hazards

This product contains no PBT/vPvB chemicals.

This product contains no endocrine disrupting chemicals.

Section 3. Composition/information on ingredients

3.2. Mixtures

If the product contains substances that present a hazard according to Regulation (EC) No. 1272/2008 [CLP/GHS], they are listed below.

Ingredient/Chemical Designations	Weight %	Classification according to regulation EC No. 1272/2008*	Notes
Distillates (petroleum), hydrotreated heavy paraffinic CAS Number: 0064742-54-7 EC No. 265-157-1 Index No.: 0064742-54-7	75 - 100	Carc. 1B;H350	H; L [^] CLP 3.1

Molybdenum, N,N-bis(C11-14-branched and linear alkyl)carbamodithioate oxo thioxo complexes CAS Number: 0906665-74-5 EC No. 842-517-1 Index No.:	1 - 5	Aquatic Chronic 4;H413	
Distillate (petroleum) hydrotreated heavy naphthenic CAS Number: 0064742-52-5 EC No. 265-155-0 Index No.: 649-465-00-7	0.10 - 1.0	Asp. Tox. 1;H304	Acute M-Factor: 1 Chronic M-Factor: 1 H; L ^{^CLP 3.1}

^{^CLP 31} Reference EC No. 1272/2008 1.1.3.1. Notes relating to the identification, classification and labelling of substances (Table 3.1).

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eye	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.
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Treat symptomatically. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.

Unsuitable extinguishing media: Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

ERG Guide No. ----

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: Strong oxidizing agents and acids.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No available information

Section 8. Exposure controls / personal protection

8.1. Control parameters

Exposure			
CAS No.	Ingredient	Source	Value
0064742-52-5	Distillate (petroleum) hydrotreated heavy naphthenic	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		OSHA	No Established Limit

0064742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic	ACGIH	No Established Limit
		NIOSH	No Established Limit
0906665-74-5	Molybdenum, N,N-bis(C11-14-branched and linear alkyl)carbamodithioate oxo thioxo complexes	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

Contains mineral oil. The exposure limits for oil mist are 5 mg/m³ OSHA PEL and 10 mg/m³ ACGIH.

8.2. Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Eyes	Protective safety glasses recommended
Skin	Avoid skin contact. Protective gloves recommended.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Color: Viscous Green Physical State: Liquid
Odor	None
Odor threshold	No available information
pH	7.8
Melting point / freezing point	No available information
Initial boiling point and boiling range	151 C
Flash Point	°F °C, Test method: (Open cup)

Evaporation rate (Ether = 1)	nil
Flammability (solid, gas)	No available information
Upper/lower flammability or explosive limits	Lower Explosive Limit: 0.8 Upper Explosive Limit: 7.0
Vapor pressure (Pa)	No available information
Vapor Density	>5
Relative Density	0.87
Solubility in Water	Not miscible in water.
Partition coefficient n-octanol/water (Log Kow)	No available information
Auto-ignition temperature	356C
Decomposition temperature	No available information
Viscosity (cSt)	59.3 cSt @ 40C
VOC Content	0
9.2. Other information	
DMSO extract by IP346: Less than 3.0 wt % (mineral oil component only)	

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No available information

10.4. Conditions to avoid

Excessive heat and open flame.

10.5. Incompatible materials

Strong oxidizing agents and acids.

10.6. Hazardous decomposition products

High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

Section 11. Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Distillate (petroleum) hydrotreated heavy naphthenic - (64742-52-5)	> 5,000.00, Rat - Category: NA	No data available	No data available	5.70, Rat - Category: NA	No data available
Distillates (petroleum), hydrotreated heavy paraffinic - (64742-54-7)	> 5,000.00, Rat - Category: NA	> 5,000.00, Rabbit - Category: NA	No data available	No data available	No data available
Molybdenum, N,N-bis(C11-14-branched and linear alkyl)carbamodithioate oxo thioxo complexes - (906665-74-5)	No data available	No data available	No data available	No data available	No data available

Carcinogen Data

CAS No.	Ingredient	Source	Value
		OSHA	Regulated Carcinogen: No

0064742-52-5	Distillate (petroleum) hydrotreated heavy naphthenic	NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
0064742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
0906665-74-5	Molybdenum, N,N-bis(C11-14-branched and linear alkyl)carbamodithioate oxo thioxo complexes	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	---
Acute toxicity (dermal)	---	---
Acute toxicity (inhalation)	---	---
Skin corrosion/irritation	---	---
Serious eye damage/irritation	---	---
Respiratory sensitization	---	---
Skin sensitization	---	---
Germ cell mutagenicity	---	---
Carcinogenicity	1B	May cause cancer.
Reproductive toxicity	---	---
STOT-single exposure	---	---
STOT-repeated exposure	---	---
Aspiration hazard	---	---

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l	3hr IC50 Bacteria mg/l
Distillate (petroleum) hydrotreated heavy	5,000.00,	1,000.00,	1,000.00 (96 hr),	---

naphthenic - (64742-52-5)	Oncorhynchus mykiss	Daphnia magna	Scenedesmus subspicatus	
Distillates (petroleum), hydrotreated heavy paraffinic - (64742-54-7)	>100.00, Pimephales promelas	>10,000.00, Daphnia magna	100.00 (72 hr), Pseudokirchneriella subcapitata	---
Molybdenum, N,N-bis(C11-14-branched and linear alkyl)carbamodithioate oxo thioxo complexes - (906665-74-5)	---	---	---	---

11.2.1 Endocrine disrupting properties

This product contains no endocrine disrupting chemicals.

Section 12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

No available information

12.4. Mobility in soil

No available information

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6 Endocrine disrupting properties

This product contains no endocrine disrupting chemicals.

12.7. Other adverse effects

No available information

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable Sub Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air class: Not Applicable Sub Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No;		
14.6. Special precautions for user	No available information		
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not Applicable		

Section 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Legislation

REGULATION (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). REGULATION (EC) 1272/2008 on the classification, labeling and packaging of substances and mixtures (CLP).

National Legislation

None noted.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16. Other information

SDS Revision Date 26/10/2021

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products.

Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H304 May be fatal if swallowed and enters airways.

H350 May cause cancer.

H413 May cause long lasting harmful effects to aquatic life.

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