

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Issue date: 05/22/2025 Revision date: 06/25/2026 Supersedes: 02/10/2026 Version: 9.0

SECTION 1 Identification**1.1. GHS Product identifier**

Product form	: Mixture
Product name	: Safeguard Ethanol Fuel Conditioner with Stabilizers
Type of product	: Fuel additives
Part Number	: 20576

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture	: Fuel additives
Recommended use	: Fuel additives
Restrictions on use	: No additional information available

1.4. Supplier's details

Lucas Oil Products, Inc.
3199 Harrison Way NW
Corydon, IN 47112
USA
T 800-342-2512
sds@lucasoil.com - www.LucasOil.com

1.5. Emergency phone number

Emergency number	: For Chemical Emergency Call ChemTel 24hr/day 7days/week. Within USA, Canada, Puerto Rico & US Virgin Islands: 1-800-255-3924. International: 1-813-248-0585 (collect calls accepted). Australia: 1-300-954-583. Brazil: 0-800-591-6042. China: 400-120-0751. India: 000-800-100-4086. Mexico: 800-099-0731.
------------------	---

SECTION 2 Hazard identification**2.1. Classification of the substance or mixture****Classification (GHS CA)**

Flammable liquids, Category 4	H227	Combustible liquid.
Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Skin sensitization, Category 1	H317	May cause an allergic skin reaction.
Aspiration hazard, Category 1	H304	May be fatal if swallowed and enters airways.
Full text of H-statements: see section 16		

2.2. GHS label elements, including precautionary statements**GHS CA labelling**

Hazard pictograms (GHS CA)



Signal word (GHS CA)

: Danger

Safeguard Ethanol Fuel Conditioner with Stabilizers

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Hazard statements (GHS CA)	: H227 - Combustible liquid H304 - May be fatal if swallowed and enters airways H315 - Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation
Precautionary statements (GHS CA)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing dust, fume, gas, mist, vapours, spray. P264 - Wash hands thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves, protective clothing, eye and face protection. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor. P302+P352 - IF ON SKIN: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321 - Specific treatment (see supplemental first aid instruction on this label). P331 - Do NOT induce vomiting. P333+P313 - If skin irritation or rash occurs: Get medical advice or attention. P337+P313 - If eye irritation persists: Get medical advice or attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO ₂), dry extinguishing powder to extinguish. P403 - Store in a well-ventilated place. P405 - Store locked up. P501 - Dispose of contents and container to a hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Distillates (petroleum), hydrotreated light	Distillates (petroleum), hydrotreated light distillates (petroleum), hydrotreated light / kerosine - unspecified	CAS-No.: 64742-47-8	65 - 85*	Asp. Tox. 1, H304
Polyether amine	-	CAS-No.: Undisclosed	7 - 13*	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412

Safeguard Ethanol Fuel Conditioner with Stabilizers

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
2,5-Furandione, 3-(dodecen-1-yl)dihydro-, reaction products with propylene oxide	3-(Dodecenyl)dihydro-2,5-furandione reaction products with propylene oxide	CAS-No.: 68411-58-5	< 100	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317

Full text of hazard classes and H-statements : see section 16

***Chemical name, CAS number and/or exact concentration have been withheld as CBI**

***Contains fixed concentration**

SECTION 4 First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water and soap. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting/risk of damage to lungs exceeds poisoning risk. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Do not induce vomiting. Call a physician immediately.
First-aid measures general	: If medical advice is needed, have product container or label at hand. Call a physician immediately.
Self protection of the first-aiders	: First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: May cause drowsiness or dizziness. Loss of coordination.
Symptoms/effects after skin contact	: Causes skin irritation. Redness. Itching. Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Blurred vision. redness, itching, tears. Eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Ingestion may cause nausea and vomiting. Abdominal pain. Risk of lung oedema.

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

Other medical advice or treatment	: Treat symptomatically.
-----------------------------------	--------------------------

SECTION 5 Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

Safeguard Ethanol Fuel Conditioner with Stabilizers

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

5.2. Specific hazards arising from the chemical

- | | |
|--|---|
| Fire hazard | : Heating will cause a rise in pressure with a risk of bursting. In case of fire and/or explosion do not breathe fumes. Combustible liquid. |
| Explosion hazard | : No direct explosion hazard. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

5.3. Special protective actions for fire-fighters

- | | |
|--------------------------------|---|
| Firefighting instructions | : Evacuate area. Eliminate all ignition sources if safe to do so. Exercise caution when fighting any chemical fire. Fight fire from safe distance and protected location. Use water spray or fog for cooling exposed containers. Prevent fire fighting water from entering the environment. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- | | |
|---------------------------|--|
| General measures | : No flames, no sparks. Eliminate all sources of ignition. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage. |
| Environmental precautions | : Avoid release to the environment. |

6.2. Methods and materials for containment and cleaning up

- | | |
|-------------------------|--|
| For containment | : Collect spillage. Remove ignition sources. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. Take up liquid spill into absorbent material, e.g.: powdered limestone or sand, earth, vermiculite. Move containers from fire area if it can be done without personal risk. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Clean contaminated surfaces with an excess of water. Use non-sparking tools. Notify authorities if product enters sewers or public waters. |
| Other information | : Dispose of materials or solid residues at an authorized site. |
- For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

- | | |
|-----------------------------------|---|
| Precautions for safe handling | : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. |
| Hygiene measures | : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use. |

7.2. Conditions for safe storage, including any incompatibilities

- | | |
|------------------------|---|
| Technical measures | : Keep in a cool, well-ventilated place away from heat. |
| Storage conditions | : Keep only in original container. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Store in a well-ventilated place. Keep cool. Store locked up. |
| Incompatible materials | : Direct sunlight. Heat sources. Sources of ignition. |

Safeguard Ethanol Fuel Conditioner with Stabilizers

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Packaging materials : Always store product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety procedures. Ensure exposure is below occupational exposure limits (where available). Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Eye protection:

Chemical goggles or safety glasses. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid

Appearance : No data available

Colour : No data available

Odour : No data available

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Relative evaporation rate (ether=1) : No data available

Melting point : Not applicable

Safeguard Ethanol Fuel Conditioner with Stabilizers

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Freezing point	: No data available
Boiling point	: No data available
Flash point	: 93 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: 0.842
Density	: 7.034 lb/gal
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 2.92 mm²/s @ 40 ° C
Explosive limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions of use.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
Incompatible materials	: Oxidizing agent.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hardening time:	: No additional information available

SECTION 11 Toxicological information

11.1. Likely routes of exposure

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Distillates (petroleum), hydrotreated light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 798.1175 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 oral	15000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5.28 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), 95% CL: 0,42 -
LC50 Inhalation - Rat (Dust/Mist)	> 5.2 mg/l Source: IUCLID
ATE CA (oral)	15000 mg/kg bodyweight
2,5-Furandione, 3-(dodecen-1-yl)dihydro-, reaction products with propylene oxide (68411-58-5)	
LD50 oral rat	> 5000 mg/kg Source: EPA ACToR

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.

Safeguard Ethanol Fuel Conditioner with Stabilizers

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

Distillates (petroleum), hydrotreated light (64742-47-8)

NOAEL (animal/male, F0/P)	≥ 3000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 415 [One-Generation Reproduction Toxicity Study (before 9 October 2017)]
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Distillates (petroleum), hydrotreated light (64742-47-8)

NOAEL (oral, rat, 90 days)	750 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	≥ 495 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard	: May be fatal if swallowed and enters airways.
-------------------	---

Safeguard Ethanol Fuel Conditioner with Stabilizers

Viscosity, kinematic	2.92 mm ² /s @ 40 ° C
Symptoms/effects after inhalation	: May cause drowsiness or dizziness. Loss of coordination.
Symptoms/effects after skin contact	: Causes skin irritation. Redness. Itching. Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Blurred vision. redness, itching, tears. Eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Ingestion may cause nausea and vomiting. Abdominal pain. Risk of lung oedema.

SECTION 12 Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified.

12.2. Persistence and degradability

Safeguard Ethanol Fuel Conditioner with Stabilizers

Persistence and degradability	Biodegradability in water: no data available.
Distillates (petroleum), hydrotreated light (64742-47-8)	
Persistence and degradability	Not rapidly degradable
2,5-Furandione, 3-(dodecen-1-yl)dihydro-, reaction products with propylene oxide (68411-58-5)	
Persistence and degradability	Not rapidly degradable
Polyether amine (Undisclosed)	
Persistence and degradability	Not rapidly degradable

Safeguard Ethanol Fuel Conditioner with Stabilizers

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

12.3. Bioaccumulative potential

Safeguard Ethanol Fuel Conditioner with Stabilizers

Bioaccumulative potential	No data available concerning bioaccumulation.
---------------------------	---

Distillates (petroleum), hydrotreated light (64742-47-8)

Partition coefficient n-octanol/water (Log Pow)	3.3 – 6 Source: IUCLID
---	------------------------

2,5-Furandione, 3-(dodecen-1-yl) dihydro-, reaction products with propylene oxide (68411-58-5)

Partition coefficient n-octanol/water (Log Pow)	5.08 Source: EPISUITE
---	-----------------------

12.4. Mobility in soil

Safeguard Ethanol Fuel Conditioner with Stabilizers

Ecology - soil	No additional information available.
----------------	--------------------------------------

12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
Ecological waste information	: The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

SECTION 14 Transport information

In accordance with TDG / DOT / IMDG / IATA

TDG	DOT	IMDG	IATA
14.1. UN Number			
Not regulated	NA1993	Not regulated	Not regulated
14.2. UN Proper Shipping Name			
Not regulated	Combustible liquid, n.o.s.(Petroleum Distillates)	Not regulated	Not regulated
Transport document description			
Not regulated	NA1993 Combustible liquid, n.o.s.(Petroleum Distillates), Comb Liq, III	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Combustible liquid	Not regulated	Not regulated
14.4. Packing group, if applicable			
Not regulated	III	Not regulated	Not regulated

Safeguard Ethanol Fuel Conditioner with Stabilizers

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

TDG	DOT	IMDG	IATA
14.5. Environmental hazards			
Not regulated	Dangerous for the environment: No	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

TDG

Not regulated

DOT

UN-No. (DOT) : NA1993
DOT Special Provisions (49 CFR 172.102) : 148 - Except for transportation by aircraft, when transported as a limited quantity or a consumer commodity, the maximum net capacity specified in §173.150(b)(2) of this subchapter for inner packagings may be increased to 5 L (1.3 gallons).
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

IMDG

Not regulated

IATA

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78⁹ and the IBC Code¹⁰

Not applicable

SECTION 15 Regulatory information

Distillates (petroleum), hydrotreated light (64742-47-8)

Listed on the Canadian DSL (Domestic Substances List)

2,5-Furandione, 3-(dodecen-1-yl)dihydro-, reaction products with propylene oxide (68411-58-5)

Listed on the Canadian DSL (Domestic Substances List)

Safeguard Ethanol Fuel Conditioner with Stabilizers

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Safeguard Ethanol Fuel Conditioner with Stabilizers

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Distillates (petroleum), hydrotreated light (64742-47-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on INSQ (Mexican National Inventory of Chemical Substances)

2,5-Furandione, 3-(dodecen-1-yl)dihydro-, reaction products with propylene oxide (68411-58-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Polyether amine (Undisclosed)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16 Other Information

Issue date : 05/22/2025

Revision date : 06/25/2026

Supersedes : 02/10/2026

Data sources : Supplier's safety documents.

Training advice : Training staff on good practice.

Full text of hazard classes and H-statements:

H227	Combustible liquid
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), Canada

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.