

**Safety Data Sheet**

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)  
Issue date: 8/14/2025 Revision date: 11/14/2025 Supersedes: 8/14/2025 Version: 2.0

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

Product form : Mixture  
Product name : Synthetic Universal Hydraulic Fluid  
Part Number : 10524

**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 : Lubricating oil  
Recommended use : Automotive products  
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](mailto:sds@lucasoil.com) - [www.LucasOil.com](http://www.LucasOil.com)

**1.5. Emergency phone number**

Emergency number : For Chemical Emergency Call ChemTel 24hr/day 7days/week  
Within USA, Canada, Puerto Rico and US Virgin Islands: 1-800-255-3924  
International: 1-813-248-0585  
(collect calls accepted)

**SECTION 2 Hazard Identification****2.1. Classification of the substance or mixture****GHS US classification**

Not classified

**2.2. Label elements****GHS US labeling**

No labeling applicable

**2.3. Hazards associated with known or reasonably anticipated uses**

No additional information available

**2.4. Hazards not otherwise classified**

No additional information available

**2.5. Unknown acute toxicity**

No additional information available

# Synthetic Universal Hydraulic Fluid

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

### SECTION 3 Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	CAS-No.: 72623-87-1	80 - 100*	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated heavy paraffinic	CAS-No.: 64742-54-7	5 - 10*	Asp. Tox. 1, H304
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	CAS-No.: 68649-42-3	1 - 5*	Skin Irrit. 2, H315 Eye Irrit. 2, H319

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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

### SECTION 4 First aid measures

#### 4.1. Description of necessary first-aid measures

First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	: Get medical attention if symptoms occur. Wash skin with plenty of water.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. When in doubt or if symptoms are observed, get medical advice. Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth out with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Call a poison center/doctor/physician if you feel unwell.
Personal protection for first-aid responders.	: First aid workers will be equipped with suitable personal protective equipment.

#### 4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

#### 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 (and unsuitable) extinguishing media

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

#### 5.2. Specific hazards arising from the chemical

Fire hazard	: In case of fire and/or explosion do not breathe fumes.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Carbon dioxide. Carbon monoxide.

# Synthetic Universal Hydraulic Fluid

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Evacuate area. Eliminate all ignition sources if safe to do so. Fight fire from safe distance and protected location. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering 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	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
------------------	---

#### For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area.

#### For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions	: Avoid release to the environment.

### 6.2. Methods and materials for containment and cleaning up

For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up	: Take up liquid spill into absorbent material. Move containers from fire area if it can be done without personal risk. Take up liquid spill into absorbent material. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Clean contaminated surfaces with an excess of water.
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. Wear personal protective equipment. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Do not breathe vapors. Avoid contact with skin and eyes.
Hygiene measures	: Wash contaminated clothing before reuse. 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 incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat sources. Keep only in original container. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers.

# Synthetic Universal Hydraulic Fluid

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

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). 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

##### Personal protective equipment:

Wear recommended personal protective equipment.

<b>Hand protection:</b>
Protective gloves
<b>Eye protection:</b>
If there is a risk of liquid being splashed : Safety glasses
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
No respiratory protection needed under normal use conditions

##### Personal protective equipment symbol(s):



### SECTION 9 Physical and chemical properties

#### 9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 200 °C
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 0.841
Density	: 7.023 lb/gal
Solubility	: No data available

# Synthetic Universal Hydraulic Fluid

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 40.47 mm <sup>2</sup> /s @ 40 °C
Explosion 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

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions of use.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

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

## SECTION 11 Toxicological information

### 11.1. Information on toxicological effects

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

#### Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

LD50 dermal rabbit	> 5000 mg/kg Source: IUCLID
--------------------	-----------------------------

#### Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)

LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 oral	5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg Source: IUCLID
LD50 dermal	5000 mg/kg
ATE US (oral)	5000 mg/kg body weight
ATE US (dermal)	5000 mg/kg body weight

# Synthetic Universal Hydraulic Fluid

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)	
LD50 oral rat	3195 mg/kg Source: ECHA
LD50 dermal rabbit	> 3160 mg/kg Source: ECHA
LC50 Inhalation - Rat	> 5 mg/l air Animal: rat, Guideline: other:
ATE US (oral)	3195 mg/kg body weight

Skin corrosion/irritation : Not classified

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)	
pH	5.5 – 7.5 Concentration: 1 vol%

Serious eye damage/irritation : Not classified

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)	
pH	5.5 – 7.5 Concentration: 1 vol%

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)	
NOAEL (animal/female, F0/P)	300 mg/kg body weight Animal: rat, Animal sex: female, Guideline: other:
NOAEL (animal/female, F1)	1000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: other:

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LOAEL (oral,rat,90 days)	125 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation,rat,dust/mist/fume,90 days)	> 0.98 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	
LOAEL (oral,rat,90 days)	125 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation,rat,dust/mist/fume,90 days)	> 0.98 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

Aspiration hazard : Not classified

Synthetic Universal Hydraulic Fluid	
Viscosity, kinematic	40.47 mm <sup>2</sup> /s @ 40 ° C

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Viscosity, kinematic	18 mm <sup>2</sup> /s
Hydrocarbon	Yes
Aliphatic, alicyclic or aromatic hydrocarbon	Yes

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	
Viscosity, kinematic	12 mm <sup>2</sup> /s
Hydrocarbon	Yes

# Synthetic Universal Hydraulic Fluid

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
<b>Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)</b>	
Viscosity, kinematic	9 – 15 mm <sup>2</sup> /s Temp.: 'other:' Parameter: 'kinematic viscosity (in mm <sup>2</sup> /s)'
Symptoms/effects after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

## SECTION 12 Ecological information

### 12.1. Ecotoxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or 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

<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
LC50 - Fish [1]	> 5000 mg/l
EC50 - Crustacea [1]	> 1000 mg/l Source: IUCLID
EC50 96h - Algae [1]	> 1000 mg/l Source: IUCLID

<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)</b>	
LC50 - Fish [1]	> 5000 mg/l Source: IUCLID
EC50 - Crustacea [1]	> 1000 mg/l Source: IUCLID

### 12.2. Persistence and degradability

<b>Synthetic Universal Hydraulic Fluid</b>	
Persistence and degradability	Biodegradability in water: no data available.

<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
Persistence and degradability	Not rapidly degradable

<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)</b>	
Persistence and degradability	Not rapidly degradable

<b>Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)</b>	
Persistence and degradability	Not rapidly degradable

### 12.3. Bioaccumulative potential

<b>Synthetic Universal Hydraulic Fluid</b>	
Bioaccumulative potential	No data available concerning bioaccumulation.

<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6 Source: IUCLID

# Synthetic Universal Hydraulic Fluid

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6 Source: IUCLID
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)	
Partition coefficient n-octanol/water (Log Pow)	14.876 Source: ECHA

### 12.4. Mobility in soil

Synthetic Universal Hydraulic Fluid	
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.

## SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

### 14.6. Transport in bulk

Not applicable

### 14.7. Special precautions for user

**DOT**  
Not regulated

# Synthetic Universal Hydraulic Fluid

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

### TDG

Not regulated

### IMDG

Not regulated

### IATA

Not regulated

## SECTION 15 Regulatory information

### 15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### 15.2. International regulations

#### CANADA

##### Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Listed on the Canadian DSL (Domestic Substances List)

##### Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)

Listed on the Canadian DSL (Domestic Substances List)

##### Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

##### Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

##### Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

### 15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 11/14/2025

Issue date : 8/14/2025

# Synthetic Universal Hydraulic Fluid

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

---

Data sources : Supplier's safety documents.  
Training advice : Training staff on good practice.

Full text of hazard classes and H-statements	
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation

Safety Data Sheet (SDS), USA

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.