

H-T-L perma USA, LP  
Charlotte, NC 28273

Date printed 08.02.2024, Revision 17.01.2023

Version 1.1

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**perma LOAD LX 460-1 (SF181)**  
**perma LOAD LX 460-2 (SF191)**

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

#### 1.2.1 Relevant uses

Lubricant

#### 1.2.2 Uses advised against

None known.

### 1.3 Details of the supplier of the safety data sheet

#### Company

H-T-L perma USA, LP  
10333 Westlake Dr  
Charlotte, NC 28273 / USA  
Phone +1(704) 377-3100  
Fax +1(704) 377-3106  
Homepage [www.permausa.com](http://www.permausa.com)  
E-mail [info@permausa.com](mailto:info@permausa.com)

#### Address enquiries to

#### Technical information

[info@permausa.com](mailto:info@permausa.com)

#### Safety Data Sheet

[sdb@chemiebuero.de](mailto:sdb@chemiebuero.de) (No dispatch of safety data sheets)  
Safety data sheets are available from the supplier.

### 1.4 Emergency telephone number

#### Company

(800) 997-3762 [8:00 AM – 5:00 PM Eastern Standard Time (EST)]

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Skin Sens. 1: H317 May cause an allergic skin reaction.

### 2.2 Label elements

The product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2012)

#### Hazard pictograms



#### Signal word

WARNING

#### Contains:

Thiadiazole c, CAS: Trade secret  
Thiadiazole (b), CAS: Trade secret  
Thiadiazole (a), CAS: Trade secret

#### Hazard statements

H317 May cause an allergic skin reaction.

#### Precautionary statements

P261 Avoid breathing dust.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water/soap.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P363 Wash contaminated clothing before reuse.  
P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.

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### 2.3 Other hazards

**Human health dangers**

Frequent persistent contact with the skin can cause skin irritation.

**Other hazards**

No particular hazards known.

This product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200.

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
5 - 15	Lithium carboxylate complex soap
	CAS: Trade secret
0,5 - 1,5	Thiadiazole c
	CAS: Trade secret
0,1 - 0,5	Thiadiazole (b)
	CAS: Trade secret
0,1 - 0,5	Thiadiazole (a)
	CAS: Trade secret

**Comment on component parts**

For full text of H-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information**

Take off contaminated clothing and wash before reuse.

**Inhalation**

Ensure supply of fresh air.  
In the event of symptoms seek medical treatment.

**Skin contact**

In case of contact with skin wash off immediately with soap and water.  
Consult a doctor if skin irritation persists.

**Eye contact**

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.

**Ingestion**

Do not induce vomiting.  
Rinse out mouth and give plenty of water to drink.  
Consult a doctor immediately.

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

Dizziness  
Nausea, vomiting.

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

Treat symptomatically.  
Forward this sheet to the doctor.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**

Foam, dry powder, water spray jet, carbon dioxide

**Extinguishing media that must not be used**

Full water jet

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## 5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.  
Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide (CO)  
Sulphur oxides (SO<sub>x</sub>).

## 5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.  
Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.  
Use personal protective equipment.  
Keep away from all sources of ignition.  
Some risk of slipping due to spillage of product.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically.  
Dispose of absorbed material in accordance within the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Use only in well-ventilated areas.  
Keep away from open flames, hot surfaces and sources of ignition.  
Do not eat, drink or smoke when using this product.  
Remove soiled or soaked clothing.  
Wash hands before breaks and after work.  
Use barrier skin cream.  
Take off contaminated clothing and wash before reuse.  
Cloths contaminated with product should not be kept in trouser pockets.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.  
Do not store together with oxidizing agents.  
Keep container tightly closed.  
Keep container in a well-ventilated place.  
Store in a dry place.

### 7.3 Specific end use(s)

See product use, SECTION 1.2

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Ingredients with occupational exposure limits to be monitored (US)

Not applicable

### 8.2 Exposure controls

**Additional advice on system design** Ensure adequate ventilation on workstation.

**Eye protection** safety glasses (EN 166:2001)

**Hand protection** The details concerned are recommendations. Please contact the glove supplier for further information.  
> 0,5 mm: Nitrile rubber, >240 min (EN 374-1/-2/-3).

**Skin protection** Protective clothing (EN 340)

**Other** Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.  
Avoid contact with eyes and skin.

**Respiratory protection** Not required under normal conditions.

**Thermal hazards** No information available.

**Delimitation and monitoring of the environmental exposition** Comply with applicable environmental regulations limiting discharge to air, water and soil.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Liquid
Form	pasty
Color	grey opaque
Odor	like mineral oil
Odor threshold	7 - 7,2
pH-value	No information available.
pH-value [1%]	No information available.
Boiling point or initial boiling point and boiling range [°C]	> 371 (>700°F)
Flash point [°C]	> 204 (>400°F)
Flammability	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidizing properties	No
Vapor pressure/gas pressure [kPa]	No information available.
Density [g/cm <sup>3</sup> ]	0,9174
Relative density	Not determined
Bulk density [kg/m <sup>3</sup> ]	No information available.
Solubility in water	insoluble
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	No information available.
Kinematic viscosity	460 mm <sup>2</sup> /s (40°C/104°F)
Relative vapour density	No information available.
Melting point [°C]	
Auto-ignition temperature [°C]	No information available.
Decomposition temperature [°C]	No information available.
Particle characteristics	No information available.

### 9.2 Other information

No 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 ambient conditions (ambient temperature).

### 10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

### 10.4 Conditions to avoid

Strong heating.

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### 10.5 Incompatible materials

Strong oxidizing agent.

### 10.6 Hazardous decomposition products

In the case of heating following (decomposition) products may occur:

Carbon dioxide (CO<sub>2</sub>).

Carbon monoxide (CO).

Sulphurous oxides (SO<sub>x</sub>).

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute oral toxicity

Product
Based on the information available, the classification criteria have not been fulfilled.
Substance
Lithium carboxylate complex soap, CAS: Trade secret
ATE, oral, 500 mg/kg bw
Thiadiazole (b), CAS: Trade secret
LD50, oral, Rat, > 2500 mg/kg bw
Thiadiazole c, CAS: Trade secret
LD50, oral, Rat, 6480 mg/kg bw

#### Acute dermal toxicity

Product
Based on the information available, the classification criteria have not been fulfilled.
Substance
Lithium carboxylate complex soap, CAS: Trade secret
LD50, dermal, Rat, > 2000 mg/kg bw
Thiadiazole (b), CAS: Trade secret
LD50, dermal, Rat, > 2000 mg/kg bw
Thiadiazole c, CAS: Trade secret
LD50, dermal, Rabbit, > 2000 mg/kg bw

#### Acute inhalational toxicity

Product
Based on the information available, the classification criteria have not been fulfilled.
Substance
Thiadiazole (a), CAS: Trade secret
ATE, inhalativ (dust), 1.5 mg/l/4h

<b>Serious eye damage/irritation</b>	Slight irritant effect - does not require labelling.
<b>Skin corrosion/irritation</b>	Based on the information available, the classification criteria have not been fulfilled.
<b>Respiratory or skin sensitisation</b>	May cause an allergic skin reaction. Calculation method
<b>Specific target organ toxicity — single exposure</b>	Based on the information available, the classification criteria have not been fulfilled.
<b>Specific target organ toxicity — repeated exposure</b>	Based on the information available, the classification criteria have not been fulfilled.
<b>Mutagenicity</b>	Based on the information available, the classification criteria have not been fulfilled.
<b>Reproduction toxicity</b>	Based on the information available, the classification criteria have not been fulfilled.
<b>Carcinogenicity</b>	Based on the information available, the classification criteria have not been fulfilled.
<b>Aspiration hazard</b>	Based on the information available, the classification criteria have not been fulfilled.
<b>General remarks</b>	Frequent persistent contact with the skin can cause skin irritation. The toxicity data listed pertaining to the ingredients are intended for those working in the

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medicinal professions, experts for occupational health and safety and toxicologists.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product
Based on the information available, the classification criteria have not been fulfilled.
Substance
Lithium carboxylate complex soap, CAS: Trade secret
LC50, (96h), fish, > 100 mg/L
Thiadiazole (b), CAS: Trade secret
LC50, (96h), fish, > 100 mg/L
EC50, (48h), Daphnia magna, 18 mg/L
NOEC, (48h), Daphnia magna, 0.56 mg/L

### 12.2 Persistence and degradability

<b>Behaviour in environment compartments</b>	No information available.
<b>Behaviour in sewage plant</b>	No information available.
<b>Biological degradability</b>	No information available.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

### 12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

### 12.7 Other adverse effects

The product is insoluble in water.  
Ecological data of complete product are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Coordinate disposal with the authorities if necessary.

#### Contaminated packaging

Uncontaminated packaging may be taken for recycling.  
Packaging that cannot be cleaned should be disposed of as for product.

#### RCRA Hazard Class (40CFR 261)

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.



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## SECTION 14: Transport

### 14.1 UN number

Transport by land according to ADR/RID Not applicable

Inland navigation (ADN) Not applicable

Marine transport in accordance with IMDG Not applicable

Air transport in accordance with IATA Not applicable

DOT Road Shipment Information (49 CFR) Not applicable

### 14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

DOT Road Shipment Information (49 CFR) NOT CLASSIFIED AS "DANGEROUS GOODS"

### 14.3 Transport hazard class(es)

Transport by land according to ADR/RID Not applicable

Inland navigation (ADN) Not applicable

Marine transport in accordance with IMDG Not applicable

Air transport in accordance with IATA Not applicable

DOT Road Shipment Information (49 CFR) Not applicable

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#### 14.4 Packing group

Transport by land according to ADR/RID Not applicable

Inland navigation (ADN) Not applicable

Marine transport in accordance with IMDG Not applicable

Air transport in accordance with IATA Not applicable

DOT Road Shipment Information (49 CFR) Not applicable

#### 14.5 Environmental hazards

Transport by land according to ADR/RID No

Inland navigation (ADN) No

Marine transport in accordance with IMDG No

Air transport in accordance with IATA No

DOT Road Shipment Information (49 CFR) No

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

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## SECTION 15: Regulatory information

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

#### US Regulations

##### National regulations

29 CFR 1910.1200-HCS 2012, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65

##### - SARA, 302

This product does not contain any ingredients regulated under this list.

##### - SARA, 311

This product does not contain any ingredients regulated under this list.

##### - SARA, 313

This product does not contain any ingredients regulated under this list.

##### - CA Proposition 65

No components require labeling under California Proposition 65.

##### - TSCA

All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.

##### - FDA

No information available.

##### American Conference of Governmental Industrial Hygienists - ACGIH

Ingredients not listed as carcinogens.

##### International Agency for Research on Cancer IARC

Ingredients not listed as carcinogens.

##### National Toxicology Program - NTP

This product is not named NTP - National Toxicology Program.

##### HAP-VOC

Not applicable

##### Transport-regulations

DOT-Classification, ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2024)

### 15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

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## SECTION 16: Other information

### 16.1 Abbreviations and acronyms:

ACGIH = American Conference of Governmental Industrial Hygienists;  
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route;  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses;  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure;  
CAS = Chemical Abstracts Service;  
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;  
CFR = Code of Federal Regulations;  
CPR = Controlled Products Regulations;  
DMEL = Derived Minimum Effect Level;  
DNEL = Derived No Effect Level;  
DOT = Department of Transportation;  
EC50 = Median effective concentration;  
EPA = Environmental Protection Agency;  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals;  
IATA = International Air Transport Association;  
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;  
IC50 = Inhibition concentration, 50%;  
IMDG = International Maritime Code for Dangerous Goods;  
IARC = International Agency of Research on Cancer;  
IATA = International Air Transport Association;  
TSCA = Toxic Substance Control Act;  
HMIS = Hazardous Materials Identification System;  
NFPA = National Fire Protection Association;  
NIOSH = National Institute for Occupational Safety and Health;  
OSHA = Occupational Safety and Health Administration;  
LC50 = Lethal concentration, 50%;  
LD50 = Median lethal dose, 50%;  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships;  
PBT = Persistent, Bioaccumulative and Toxic substance;  
PNEC = Predicted No-Effect Concentration;  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals;  
SARA = Superfund Amendments and Reauthorization Act;  
TLV@TWA = Threshold limit value – time-weighted average;  
TLV@STEL = Threshold limit value – short-time exposure limit;  
VOC = Volatile Organic Compounds;  
vPvB = very Persistent and very Bioaccumulative;

### 16.2 Ratings

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#### NFPA Ratings



TOP, FLAMMABILITY: 1 - Slight Hazard  
LEFT, HEALTH: 2 - Moderate Hazard  
RIGHT, REACTIVITY: 0 - Minimal Hazard  
BOTTOM, SPECIAL NOTICE: 20.NFPA.X0

#### HMIS Ratings

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

2 - Moderate Hazard  
1 - Slight Hazard  
0 - Minimal Hazard  
X - Personal protection rating to be supplied by user depending on use conditions

#### PERSONAL PROTECTION:

- A - Safety Glasses
- B - Safety Glasses and Gloves
- C - Safety Glasses, Gloves and Protection Apron
- D - Face Shield, Gloves and Protection Apron
- E - Safety Glasses, Gloves and Dust Respirator
- F - Safety Glasses, Gloves, Protection Apron and Dust Respirator
- G - Safety Glasses, Gloves and Vapor Respirator.
- H - Splash Goggles, Gloves, Protection Apron and Vapor Respirator.
- I - Safety Glasses, Gloves, Dust Respirator and Vapor Respirator.
- J - Splash Goggles, Gloves, Protection Apron, Dust Respirator and Vapor Respirator.
- K - Airline Mask or Hood, Gloves, Full Suit and Boots.
- X - Personal protection rating to be supplied by user depending on use conditions

#### Modified position

1.2, 1.3, 3.2, 8.1, 9.1, 11.1, 11.2, 12.6, 12.7, 15.1, 16.2, 16.3

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