

SAFETY DATA SHEET

MSDS 03 -LHM Plus

SECTION 1: Identification

1.1. Product identifier

Trade name

MSDS 03 -LHM Plus

Product no.

24

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

Relevant identified uses of the substance or mixture

Hydraulic fluid

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Orthene Chemicals .Ltd

Brember Road

HA2 8UJ Harrow

United Kingdom

+44 (0)20 8864 4414

E-mail

technical@orthene.co.uk

SDS date

10/15/2024

SDS Version

4.0

Date of previous version

9/11/2023 (3.0)

1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® ([triage.webpoisoncontrol.org](https://www.triage.webpoisoncontrol.org)) to get specific guidance for your case

See also section 4 "First aid measures".

SECTION 2: Hazard(s) identification

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.1. Classification of the substance or mixture

Asp. Tox. 1; H304, May be fatal if swallowed and enters airways.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

May be fatal if swallowed and enters airways. (H304)

Precautionary statement(s)

General

-

Prevention

Do not breathe vapour/mist. (P260)

Response

IF SWALLOWED: Immediately call a POISON CENTER/doctor. (P301+P310)

Do NOT induce vomiting. (P331)

Storage

-

Disposal

Dispose of contents/container in accordance with local regulation (P501)

Additional labelling

Not applicable.

2.3. Other hazards

▼ Additional warnings

Product is not classified as combustible but will burn.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based;	CAS No.: 72623-86-0	60-100%	Asp. Tox. 1, H304	[19]
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics	CAS No.: 64742-46-7	15-25%	Asp. Tox. 1, H304	
(4-nonylphenoxy)acetic acid	CAS No.: 3115-49-9	<0.05%	Acute Tox. 4, H302 Skin Corr. 1B, H314 Skin Sens. 1A, H317 Eye Dam. 1, H318	

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: First-aid measures

4.1. Description of first aid measures

General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

If recovery is not rapid, seek medical attention.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and

soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Remove contact lenses and open eyes widely. Flush eyes with water or saline water(20-30°C) for at least 5 minutes.

If any irritation persists, seek medical assistance and continue flushing during transport.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER/doctor.

Do not induce vomiting! If vomiting occurs, keep head facing down so that vomit does not get into the lungs. Call a doctor or ambulance. Symptoms of chemical pneumonia can appear after several hours. People who have swallowed the product should therefore be kept under medical attention for at least 48 hours.

Burns

Not applicable.

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

This product contains substances that can cause chemical pneumonia if swallowed. Symptoms of chemical pneumonia may appear after several hours.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Treat according to symptoms. There is no specific antidote.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbon dioxide, powder, water mist. Waterjets should not be used, since they can spread the fire. However they may be used to cool adjacent containers.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Prevent unnecessary personnel entering area of a spill. When cleaning up large spills appropriate protective clothing should be worn - see section 8.

Avoid direct contact with spilled substances.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

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.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Avoid any method of handling that generates mists or aerosols.
- Avoid direct contact with the product.
- Do not eat, drink or smoke when handling this product.
- See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage conditions

Room temperature 15 to 30°C

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations

Do not eat, drink or smoke when handling this product.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

Keep spill absorbent materials available in the workplace. If possible, clean up any spills immediately.

Individual protection measures, such as personal protective equipment

Generally

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

Respiratory Equipment

Type	Class	Colour	Standards
S/SL	P2	White	EN149



Skin protection

No specific requirements.

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0,2	> 480	EN374-2, EN374-3, EN388



Eye protection

Type	Standards
Wear safety glasses with side shields.	EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Color

Green

Odor

Characteristic

▼ Odor threshold (ppm)

No relevant or available data due to the nature of the product.

▼ pH

No relevant or available data due to the nature of the product.

Density (g/cm³)

0.853 (15.6 °C)

Kinematic viscosity

19.1 centistokes (40 °C)

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/freezing point (°F)

-

Melting point/freezing point (°C)

< -52

Softening point/range (°F)

Does not apply to liquids.

Boiling point (°F)

-

Boiling point (°C)

>320

Vapor pressure

0.1 kPa (20 °C)

▼ Relative vapor density

No relevant or available data due to the nature of the product.

▼ Decomposition temperature (°F)

No relevant or available data due to the nature of the product.

Data on fire and explosion hazards

Flash point (°F)

-

Flash point (°C)

124 Pensky-Martens closed cup

▼ Flammability (°F)

No relevant or available data due to the nature of the product.

▼ Auto-ignition temperature (°F)

No relevant or available data due to the nature of the product.

▼ Explosion limits (% v/v)

No relevant or available data due to the nature of the product.

Solubility

Solubility in water

Insoluble

▼ n-octanol/water coefficient (LogKow)

No relevant or available data due to the nature of the product.

▼ Solubility in fat (g/L)

No relevant or available data due to the nature of the product.

9.2. Other information

Other physical and chemical parameters

No data available.

▼ Oxidizing properties

No relevant or available data due to the nature of the product.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as indicated.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

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

Based on available data, the classification criteria are not met.

Oral -Based on ingredients toxicity is expected to be low (LD 50 Rat >5,000 mg/kg).

Inhalation - Vapours unlikely to be hazardous at ambient temperatures due to low vapour pressure of product.

Dermal - Based on ingredients toxicity is expected to be low (LD 50 Rabbit >3000 mg/kg).

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

May be fatal if swallowed and enters airways.

The Kinematic viscosity < 20.5 cSt at 20° C. Can cause Oil Pneumoconiosis.

Long term effects

None known.

Other information

Prolonged or repeated contact with used oil may cause serious skin diseases such as dermatitis or skin cancer.

SECTION 12: Ecological information

- 12.1. **Toxicity**
Acute toxicity to aquatic or soil organisms is expected to be low. However oil spills can smother and suffocate by preventing passage of oxygen and may foul or smother birds and other marine animals.
- 12.2. **Persistence and degradability**
The product is expected to be inherently but not readily biodegradable based on its ingredients
- 12.3. **▼ Bioaccumulative potential**
Based on available data, the classification criteria are not met.
- 12.4. **Mobility in soil**
Product is insoluble in water on which it floats. Product is non-volatile. Limited mobility in soil although can cause groundwater contamination.
- 12.5. **Results of PBT and vPvB assessment**
This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
- 12.6. **Other adverse effects**
None known.

SECTION 13: Disposal considerations

- Waste treatment methods**
Dispose of in accord with local and national regulations. Recycling or incineration with energy recovery are recommended.
- RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)**
None of the components are listed
- Specific labelling**
- Contaminated packing**
Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
DOT	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

- * Packing group
- ** Environmental hazards
- Additional information**
Not dangerous goods according to DOT, IATA and IMDG.
- 14.6. **Special precautions for user**
Not applicable.
- 14.7. **Transport in bulk according to IMO instruments**
No data available.

SECTION 15: Regulatory information

- 15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2. **▼ U.S. Federal regulations**
TSCA (the non-confidential portion)
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; is listed
Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons

having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] is listed
(4-nonylphenoxy)acetic acid is listed

Clean Air Act

None of the components are listed

EPCRA Section 302

None of the components are listed

EPCRA Section 304

None of the components are listed

EPCRA section 313

None of the components are listed

CERCLA

None of the components are listed

▼ Hazardous chemical inventory reporting

This product is subject to Tier II reporting.

▼ State regulations

California / Prop. 65

None of the components are listed

▼ Massachusetts / Right To Know Act

Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] is listed

New Jersey / Right To Know Act

None of the components are listed

New York / Right To Know Act

None of the components are listed

Pennsylvania / Right To Know Act

None of the components are listed

15.4. Restrictions for application

No special.

15.5. Demands for specific education

No specific requirements.

▼ 15.6. Additional information

Not applicable.

15.7. Chemical safety assessment

No

15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H302, Harmful if swallowed.

H304, May be fatal if swallowed and enters airways.

H314, Causes severe skin burns and eye damage.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

DOT = Department of Transportation
 EINECS = European Inventory of Existing Commercial chemical Substances
 EPCRA = Emergency Planning and Community Right-To-Know Act
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 HCIS = Hazardous Chemical Information System
 HNOC = Hazards Not Otherwise Classified
 IARC = International Agency for Research on Cancer
 IATA = International Air Transport Association
 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)
 NFPA = National Fire Protection Association
 NIOSH = National Institute for Occupational Safety and Health
 OECD = Organisation for Economic Co-operation and Development
 OSHA = Occupational Safety and Health Administration
 PBT = Persistent, Bioaccumulative and Toxic
 RCRA = Resource Conservation and Recovery Act
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SARA = Superfund Amendments and Reauthorization Act
 SCL = A specific concentration limit.
 STEL = Short-term exposure limits
 STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 TSCA = The Toxic Substances Control Act
 TWA = Time weighted average
 UN = United Nations
 UVBC = Unknown or variable composition, complex reaction products or of biological materials
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

The information contained herein is based on the present knowledge and experience of Orthene Chemicals Ltd. It in no way constitutes the users own assessment of work place risk as required by other Health and Safety legislation. Orthene Chemicals Ltd. does not, by supplying this information, guarantee or warrant any specific properties or qualities of goods supplied. It is the responsibility of the purchaser to determine whether the goods ordered are fit for any purpose for which they may be required.

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The safety data sheet is validated by

Christopher Coulthard

▼ Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en