SAFETY DATA SHEET

This safety data sheet has been prepared in accordance with the following requirements:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

M-ONE PLANT LOSER
Replaces date 26-Jun-2025

Revised on 01-Sep-2025
Revision number 1.03

SECTION 1: Identification of the substance or mixture and of the company

1.1. Product identifier

Product name M-ONE PLANT LOSER

Other names

Pure substance/mixture Mixture

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

Recommended use Lubricant aids

Uses of which will None known. discouraged

1.3. Details of the supplier providing the safety data sheet

Company name
M ONE
At Kapellenberg 11
97246 Eibelstadt
Tel: +49 9366 90710

Email address info@m-one.net

1.4. Emergency number

Deutschland GGIZ Erfurt's 24-hour emergency number: +49-361-730730

SECTION 2: Potential Hazards

2.1. Classification of the substance or mixture

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

Aerosols	Category 1 - (H222, H229)
Danger of aspiration	Category 1 - (H304)

2.2. Marking elements

Contains hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycloalkanes, < 2% aromatics; Distillates (petroleum), with hydrogen treated light paraffinic; Distillates (petroleum), hydrogen-treated light naphthenic



Signal word
Danger

Danger warnings
H222 - Extremely flammable aerosol.
H229 - Container is pressurized: May burst if heated.
EU information on specific hazards
EUH066 - Repeated exposure may cause skin dryness or cracking

Safety instructions - Regulation (EC) §28, No. 1272/2008
P101 - If medical advice is required, have container or label at hand
P102 - Keep out of reach of children
P210 - Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Don't smoke
P211 - Do not spray on an open flame or other source of ignition
P251 - Do not puncture or burn, even after use
P410 + P412 - Protect from direct sunlight. Do not expose to temperatures above 50°C/122°F
P501 - Dispose of contents/container to an approved waste disposal facility

Further information
This product is subject to the requirement of a child-resistant closure and a tactile hazard warning except because it poses an aspiration hazard and in the form of an aerosol or in a sealed container Spray attachment is brought into circulation. In aerosol containers or in containers with a sealed spray device in brought into circulation.

2.3. Other dangers

Formation of explosive/highly flammable mixtures is possible if there is insufficient ventilation or through use.
Causes mild skin irritation.

PBT & vPvB
The components of this formulation do not meet the criteria for classification as a PBT or vPvB substance.
Endocrine Disorder Information
This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical Designation	Weight%	REACH registration serial number	EC no. (index-Nr.)	Classification according to Regulation (EC) Nr. 1272/2008 [CLP]	More specific concentration nslimit (SCL):	M factor	M factor (long term g)	Notice e
hydrocarbons, C10-C13, n-Alkane, isoalkanes, Cycloalkanes, <2% aromatics RR-113412-9	40 - <80	01-2119457273-39-XXXX	918-481-9	Asp. Tox. 1 (H304) (EUH066)	-	-	-	-
n-butane 106-97-8	10 - <20	01-2119474691-32-XXXX	203-448-7 (601-004-00-0)	Flam. Gas 1 (H220) Press. Gas (H280)	-	-	-	C,U
Isobutane 75-28-5	5 - <10	01-2119485395-27-XXXX	200-857-2 (601-004-00-0)	Flam. Gas 1 (H220) Press. Gas (H280)	-	-	-	C,U
Distillates (petroleum), with Hydrogen treated mild paraffinic 64742-55-8	5 - <10	01-2119487077-29-XXXX	265-158-7 (649-468-00-3)	Asp. Tox. 1 (H304)	-	-	-	L

Distillates (petroleum), with hydrogen treated mild naphthenic 64742-53-6	5 - <10	01-2119480375-34	265-156-6	Asp. Tox. 1 (H304)	-	-	-	L
2-Butoxyethanol 111-76-2	1 - <2.5	01-2119475108-36-XXXX	203-905-0 (603-014-00-0)	Acute Tox. 4 (H302) Acute Tox. 3 (H331) Skin irritation. 2 (H315) Eye irritation. 2 (H319)	-	-	-	-

Substances marked with a number starting with ·RR-· in the CAS field are substances for which no CAS number is used. We use an internal numbering system for this in our SDB software

Note C - Some organic substances can exist either in a well-defined isomeric form or as a mixture several isomers are placed on the market. In this case, the supplier must indicate on the identification label whether it is a specific isomer or a mixture of isomers.
Note L - The harmonized classification as a carcinogen is made unless it can be demonstrated that the substance contains less than 3% dimethyl sulfoxide extract, measured according to method IP 346 (·Determination of polycyclic aromatics in unused lubricating oils and asphaltene-free petroleum fractions - Dimethyl sulfoxide extraction refractive index method", Institute of Petroleum, London); in this case it is also for this hazard class must be classified in accordance with Title II of this Regulation.
Note U - When placed on the market, the gases must be classified as ·gases under pressure· in one of the groups of compressed gases, of liquefied gases, frozen gases or dissolved gases. The assignment to a group depends on the physical state in which the gas is packaged and must therefore be decided on a case-by-case basis. The following codes are assigned: Press. Gas (Comp.), Press. Gas (Liq.), Press. Gas (Ref. Liq.), Press. Gas (Diss.). Aerosols may not be classified as gases under pressure (see Annex I, Part 2, Section 2.3.2.1, Note 2).

For the wording of the H and EUH phrases see section 16

Estimation of acute toxicity

If LD50/LC50 data is not available or does not correspond to the classification category, the appropriate Conversion value from CLP Annex I, Table 3.1.2 used to calculate the Acute Toxicity Estimate (ATEmix) for classification of a mixture based on its components

Chemical Designation	EC no. (index-Nr.)	CAS no.	Oral LD 50 mg/kg	Dermal LD50 mg/kg	Inhale LC50 - 4 h - Dust/Fog - mg/l	Inhale LC50 - 4 h - Steam - mg/l	Inhale LC50 - 4 h - Gas - ppm
hydrocarbons, C10-C13, n-Alkane, isoalkanes, cycloalkanes, <2% aromatics	918-481-9	RR-113412-9	5001	-	-	>5.001	-
n-butane	203-448-7 (601-004-00-0)	106-97-8	-	-	-	-	-
Isobutane	200-857-2 (601-004-00-0)	75-28-5	-	-	-	-	-
Distillates (petroleum), with Hydrogen treated light paraffinic	265-158-7 (649-468-00-3)	64742-55-8	-	-	-	-	-
Distillates (petroleum), with hydrogen treated light naphthenic	265-156-6	64742-53-6	-	-	-	-	-
2-Butoxyethanol	203-905-0 (603-014-00-0)	111-76-2	1200 +	-	3 +	3 +	3 +

This product does not contain substances of very high concern (SVHC) on the candidate list at a concentration of >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1 Description of first aid measures

General recommendation
If medical advice is required, have packaging or identification label available. This safety data sheet must be shown to the attending physician. Immediate medical treatment is required.

Inhale
Get some fresh air. Aspiration into the lungs can cause serious complications lead to lung damage. If breathing stops, administer artificial respiration. Medical Call in help. Avoid direct contact with skin. At
Use protection against contact when performing mouth-to-mouth resuscitation. If you have difficulty breathing (trained personnel should) administer oxygen. Pulmonary edema may be delayed occur.

Eye contact
Rinse immediately thoroughly with plenty of water for at least 15 minutes, including under the skin eyelids. If possible, remove any contact lenses. Next rinse out. Keep eyes wide open while rinsing. Affected area don't rub. If irritation occurs and persists, consult a doctor.

Skin contact
Wash skin with soap and water. In case of skin irritation or allergic reactions consult a doctor.

Swallowed
IF SWALLOWED, RISK OF ASPIRATION - CAN INTO LUNGS GET THERE AND CAUSE DAMAGE. DO NOT induce vomiting. If you vomit spontaneously, keep your head below your hips to prevent aspiration prevent. Rinse mouth. Never give water to an unconscious person. Immediately seek medical advice/attention.

Self-protection of the first aider
Remove all sources of ignition. Ensure that medical staff are aware of the is informed about the substance(s) involved, takes measures to protect himself and a Spread of contamination is avoided. Wear personal protective clothing (see Section 8). Avoid direct contact with skin. At
Use protection against contact when performing mouth-to-mouth resuscitation. Prescribed ones Use personal protective equipment.

4.2. Most important acute and delayed symptoms and effects

Symptoms
Difficulty breathing. Coughing and/or wheezing. Lightheadedness. Longer lasting Contact may cause redness and irritation.

Effects upon exposure
No information is available.

4.3. Indications of immediate medical attention or special treatment

Note to the doctor
Because of the risk of aspiration, no vomiting and no gastric lavage should be performed be carried out if the risk is not posed by the danger of further toxic substances is justified.

SECTION 5: Firefighting measures

5.1. Extinguishing agent

Suitable extinguishing agents
Dry extinguishing agent. Carbon dioxide (CO_2). Spray water.

Unsuitable extinguishing agents
ONLY EXTINGUISH A FIRE CAUSED BY LEAKING GAS IF THERE IS A LEAK CAN BE STOPPED.

5.2. Special hazards arising from the substance or mixture

Special dangers arising from the risk of inflammation. Keep product and empty container away from heat and sources of ignition. Run out of substance In the event of fire, cool containers with water spray. Fire residues and contaminated fire extinguishing water must disposed of in accordance with local regulations. Gas cylinders can break in extreme heat. Handling
Damaged pressure bottles should only be repaired by professionals. Containers may explode when heated.

Dangerous combustion products Carbon oxides. Carbon monoxide. Carbon dioxide (CO_2).

5.3. Advice for firefighting

Special protective equipment and fire crews must wear self-contained breathing apparatus and complete
Precautions for Firefighting Wear emergency clothing. Use personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions Evacuate employees to safe areas. Mandatory personal Use protective equipment. For more information, see Section 8. Touch avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep people away from the spill/leak send to the windward side. REMOVE all sources of ignition (no smoking, no Sparks or flames in the immediate surrounding area). Measures against meet electrostatic charges. Inhale from Avoid dust/smoke/gas/mist/steam/aerosol.

Other information Ventilate the area. See safeguards listed in Sections 7 and 8.

emergency services Use personal protective equipment recommended in Section 8.

6.2. Environmental protection measures

Environmental protection measures See safeguards listed in Sections 7 and 8. If gefahrlos möglich weitere Leckagen oder Verschütten vermeiden. Not in that Allow access to sewers or waterways.

6.3. Methods and materials for containment and cleaning up

Methods for restraint Stop the leak if it is safe to do so. Can be used to reduce fumes a vapor suppressing foam can be used. Spills over a wide area Dam to catch runoff water. Not in drains, sewers, ditches and allow water to enter. Flood with water to complete polymerization and then scrape it off the floor.

Cleaning procedure Take measures against electrostatic charges. Contain. With inert, absorbent material. Record and place in appropriately marked areas Transfer container. Clean, spark-proof tool for collecting the Use absorbed material.

Avoiding secondary hazards Remove all sources of ignition if safe to do so. Non-recyclable residues are disposed of as chemical waste. Rinsing fluids containing organic solvents Cleaned equipment is collected and disposed of as solvent waste.

6.4. Reference to other sections

Reference to other sections For more information, see Section 8. For more information, see Section 13.

SECTION 7: Handling and storage

7.1. Protective measures for safe handling

Instructions for safe handling Use personal protective equipment. From heat, hot surfaces, sparks, Keep away from open flames and other sources of ignition. Do not smoke. Not against spray onto an open flame or other source of ignition. Measures to avoid one electrostatic discharge (which can cause organic vapors to ignite) company. Use spark-proof tools and explosion-proof equipment. Only handle the product in a closed system or with sufficient suction provide. Store in areas where a sprinkler system is installed. Do not open or burn cans. Content is under pressure. In case of a break. Avoid contact with eyes and skin. Inhalation of vapors or mist avoid.

General hygiene regulations Do not eat, drink or smoke when using. Do not contaminated work clothing wear outside the workplace. Regular cleaning of equipment work area and clothing is recommended. Hands before breaks and immediately wash after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	Protect from sunlight. From heat, sparks, flames and others Keep sources of ignition away (i.e. pilot lights, electric motors and static electricity). Store in correctly labeled containers. Not near combustibles Store materials. Store in areas where a sprinkler system is installed is. Store in accordance with specific national regulations. According to local Store regulations. Store in a cool, dry area, away from potential heat sources, open flames, direct sunlight or other chemicals. Store under lock and key. Must not fall into the hands of children reach. Store away from other materials. Only in Keep/store original container. In a closed container on one store in a dry place.

7.3. Specific end uses

Specific uses
Lubricant aids.

Risk management measures (RMM)	The required information is contained in this safety data sheet.
Other information	Please note the technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Parameters to monitor

Exposure limits

Chemical name	European Union	Germany TRGS
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, Cycloalkanes, < 2% aromatics RR-113412-9	-	C9-C14 ALIPHATES Germany TRGS 900 300 mg/m3 -8 hrs Mw. steam. C10-C13 RCP TWA 1200 mg/m3 184 ppm Total hydrocarbons (ExxonMobil)
Propane 74-98-6	-	TWA-AGW; 1000 ppm (exposure factor 4) TWA-AGW; 1800 mg/m3 (exposure factor 4);
n-butane 106-97-8	-	TWA-AGW; 1000 ppm (exposure factor 4) TWA-AGW; 2400 mg/m3 (exposure factor 4);
Isobutane 75-28-5	-	TWA-AGW; 1000 ppm (exposure factor 4) TWA-AGW; 2400 mg/m3 (exposure factor 4);
2-Butoxyethanol 111-76-2	TWA: 20 ppm; TWA: 98 mg/m3; STEL: 50 ppm; STEL: 246 mg/m3; pSk	TWA-AGW; 10 ppm (exposure factor 2); TWA-AGW; 49 mg/m3 (exposure factor 2) Sk

Biological workplace limits

Chemical name	European Union	Germany TRGS
2-Butoxyethanol 111-76-2	-	150 mg/g Creatinine (urine - Butoxyacetic acid (after hydrolysis) at the end of the shift, in case of long-term exposure after several previous shifts)

Derived exposure level without impairment. No information is available (DNEL)

Derived exposure level without impairment (DNEL)
2-Butoxyethanol (111-76-2)

Type	Route of exposure	Derived exposure level without impairment (DNEL)	Safety factor
workers Systemic effects on the Health Long term	Inhale	98 mg/m³	
workers Systemic effects on the Health Long term	Dermal	125 mg/kg body weight/day	

Derived exposure level without impairment (DNEL)			
2-Butoxyethanol (111-76-2)			
Type	Route of exposure	Derived exposure level without impairment (DNEL)	Safety factor
Consumer Systemic effects on the Health Long term	Inhale	59 mg/m³	
Consumer Systemic effects on the Health Long term	Dermal	75 mg/kg body weight/day	
Consumer Systemic effects on the Health Long term	Orally	6.3 mg/kg body weight/day	

Estimated No-effect concentration (PNEC) No information is available.

Estimated No Effect Concentration (PNEC)	
2-Butoxyethanol (111-76-2)	
Environmental compartment	Estimated No Effect Concentration (PNEC)
Fresh water	8.8 mg/l
Sea water	0.88 mg/l
Sewage treatment plant	463 mg/l
freshwater sediment	34.6 mg/kg dry weight
Seawater sediment	3.46 mg/kg dry weight
floor	2.33 mg/kg dry weight

8.2. Limiting and monitoring exposure

Technical Ensure adequate ventilation, especially in enclosed spaces. Control devices

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Eye protection must be the norm Correspond to DIN EN 166.

Hand protection Wear suitable protective gloves. Thickness of gloves > 0.7mm. Butyl rubber. Nitrile rubber. The breakthrough times for the specified glove materials are in generally greater than 480 minutes. Ensure that the breakthrough time of the Glove material is not exceeded. Information from the supplier Use breakthrough time for the specific gloves.

Recommendations Gloves must comply with the EN 374 standard

Skin and body protection	Personal protective clothing suitable to protect against contact with skin wear.
Respiratory protection	Ensure adequate ventilation when spraying. In case of insufficient ventilation Put on breathing apparatus.
Recommended filter type:	Filter for organic gases and vapors according to EN 14387. Respiratory mask according to EN 140 Wear with filter type A or better.

Limitation and monitoring of the product does not allow it to enter the environment in an uncontrolled manner.
Environmental exposure

SECTION 9: Physical and chemical properties

9.1. Information on the basic physical and chemical properties

Physical condition	liquid
Appearance	Aerosol
color	Grey
smell	Petroleum.

property	**Values**	**Remarks · Method**
Melting point / freezing point	No data available	None known
Start of boiling point and boiling range	.	Not applicable, aerosol
Inflammability	No data available	None known
Flammability limit in the Luft		None known
Upper flammability or Explosion limit	No data available	
Lower flammability or Explosion limit	No data available	
Flash point	No data available	Not applicable, aerosol
Auto-ignition temperature	>200°C	None known
Decomposition temperature		None known
pH value	No data available	Not applicable. Insoluble in water.
pH (as an aqueous solution)	No data available	None known
Viscosity, kinematic	No data available	None known
Dynamic viscosity	No data available	
Water solubility	Insoluble in water.	None known
solubility(ies)	No data available	None known
distribution coefficient	No data available	None known
Vapor pressure	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
density	0.68 - 0.71 g/cm³	
Relative vapor density	No data available	None known
Particle properties		
particle size	No information is available	
Particle size distribution	No information is available	

9.2. Other information

Solids content (%)	No information is available
Volatile organic compound content	approximately 592.1 g/L

9.2.1. Information on physical hazard classes

Not applicable

9.2.2. Other security features

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information is available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

sensitivity to mechanical impact sensitivity versus Yes. static discharge None.

10.3. Possibility of dangerous reactions

Possibility of dangerous Reactions Heating leads to an increase in pressure and the risk of bursting.

10.4. Conditions to avoid

Conditions to avoid Heat, sparks and flames. From open flames, hot surfaces and Keep ignition sources away. Extreme temperatures and direct sunlight.

10.5. Incompatible materials

Incompatible materials Incompatible with oxidizing agents.

10.6. Dangerous decomposition products

Hazardous decomposition products **None known under normal conditions of use. Stable at the recommended** Storage conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes according to Regulation (EC) No. 1272/2008

Information on likely routes of exposure

Product information

Inhale Intentional misuse through concentration and inhalation of the ingredients can occur be harmful or fatal. Specific experimental data for the substance or mixture are not available. Aspiration into the lungs can cause serious lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. Can become one Cause irritation of the respiratory tract.

Eye contact Specific test data for the substance or mixture are not available. Can cause irritation.

Skin contact Repeated exposure may cause dry or cracked skin. Specific Test data for the substance or mixture are not available. Causes slight Skin irritation.

Swallowed Specific test data for the substance or mixture are not available. At There is a risk of aspiration if swallowed. May cause lung damage if swallowed cause. Aspiration can cause pulmonary edema and pneumonitis. Can can be fatal if swallowed and enters the respiratory tract.

Symptoms related to the physical, chemical and toxicological properties

Symptoms Difficulty breathing. Coughing and/or wheezing. Lightheadedness. Longer lasting Contact may cause redness and irritation.

Acute toxicity

Toxicity index

The following ATE values ··were calculated for the mixture

ATEmix (oral)	66,157.60 mg/kg
ATEmix (dermal)	**>2000 mg/kg**
ATEmix (inhale of gas)	>20000 ppm
ATEmix (Inhale from dust/fog)	>5 mg/L
ATEmix (Inhale from steaming)	165.40 mg/L

Information about the components

Chemical Designation	LD50 orally	LD50 dermal	LC50 Inhale
hydrocarbons, C10-C13, n-Alkane, isoalkanes, Cycloalkanes, <2% aromatics	DL50 >5000 mg/kg (Rattus)	DL50 >2000 mg/kg (Oryctolagus cuniculus)	LC50 (8h) >5000 mg/m3 advice - Vapors
n-butane	-	-	=658 g/m3 (Rattus) 4 hours
Isobutane	-	-	=658 mg/L (Rattus) 4 hours
distillates (petroleum), with Hydrogen treated mild paraffinic	LD50 > 5000 mg/kg (Rattus)	LD50> 5000 mg/kg (Oryctolagus cuniculus) OECD 402	=3900 mg/m3 (Rattus) 4 hours
distillates (petroleum), with hydrogen treated mild naphthenic	LD50 >5000 mg/kg (Rattus) OECD 401	LD50 > 5000 mg/kg (Oryctolagus cuniculus) OECD 402	LC50 (4h) > 5.43 mg/L (Rattus) OECD 403
2-Butoxyethanol =	1476 mg/kg (Rattus)(OECD 401)	LD 0 >2000 mg/kg (guinea pig) (OECD 402)	LC 0 (1h) > 3.1 mg/l (guinea pig)

Delayed and immediate effects as well as chronic effects after short or long duration Exposure

Corrosion/irritation to skin Classification is based on the data available for the ingredients. Causes slight Skin irritation.

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

Eye damage/eye irritation

Respiratory sensitization or the skin Based on the available data, the classification criteria are not met.

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

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

The table below indicates which authority lists each ingredient as a carcinogen.

Chemical name	European Union
Distillates (petroleum), hydrogen-treated light naphthenic	^

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

STOT - single exposure Based on the available data, the classification criteria are not met.

STOT - repeated exposure Based on the available data, the classification criteria are not met.

Danger of aspiration May be fatal if swallowed and enters airways.

11.2. Information about other hazards

11.2.1. Endocrine disrupting properties

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

11.2.2. Other information

Other adverse effects No information is available.

SECTION 12: Ecological information

12.1. toxicity

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

Chemical Designation	Algae/water replenishments	Fish	Toxicity opposite microorganisms	Crustaceans	M factor	M factor (long term)
hydrocarbons, C10-C13, n-Alkane, isoalkanes, Cycloalkanes, <2% Aromatics RR-113412-9	LEO (72h) =1000 mg/L Algae (Pseudokirchneriella subcapitata)	LLO (96h) =1000 mg/L (Oncorhynchus mykiss)	-	LEO (48h) =1000 mg/L (Daphnia magna)		
Distillates (petroleum), with Hydrogen treated light paraffinic 64742-55-8	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)		

Distillates (petroleum), with hydrogen treated light naphthenic 64742-53-6	EL50 (72h) > 100 mg/L (Pseudokirchneriella subcapitata) OECD 201	LL50 (96h) > 100 mg/L (Pimephales promelas)	-	EL50 (48h) > 10000 mg/L (Daphnia magna) OECD 202		
2-Butoxyethanol 111-76-2	EC50 (72h) = 1840 mg/L (Pseudokirchneriella subcapitata) OECD 201	LC50: =1490mg/L (96h, Lepomis macrochirus) LC50: =2950mg/L (96h, Lepomis macrochirus)	-	EC50: >1000mg/L (48h, Daphnia magna) EC50: 1698 - 1940mg/L (24h, Daphnia magna)		

12.2. Persistence and degradability

Persistence and degradability No information is available.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycloalkanes, < 2% aromatics (RR-113412-9)			
Method	**Exposure time**	**Value**	**Results**
OECD test no. 301F: Lightweight biodegradability: Manometric respiration test (TG 301 F)	28 days		80% Slightly organic degradable

12.3. Bioaccumulative potential

Bioaccumulation

Information about the components

Chemical name	distribution coefficient
n-butane	2.31
Isobutane	2.8
2-Butoxyethanol	0.81

12.4. Mobility in the ground

Mobility in the ground No information is available.

12.5. Results of the PBT and vPvB assessment

Results of the PBT and vPvB rating Based on the available data, the classification criteria are not met.

Chemical name	PBT and vPvB assessment results
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycloalkanes, < 2% aromatics	No PBT/vPvB
n-butane	No PBT/vPvB
Isobutane	No PBT/vPvB
Distillates (petroleum), hydrotreated light paraffinic	No PBT/vPvB
Distillates (petroleum), hydrogen-treated light naphthenic	No PBT/vPvB
2-Butoxyethanol	No PBT/vPvB

12.6. Endocrine disruptive properties Endocrine disruptive properties

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

12.7. Other adverse effects Other adverse effects

Other adverse effects	No information is available.
PMT or vPvM properties	Based on the available data, the classification criteria are not met.

SECTION 13: Disposal considerations

13.1. Waste treatment processes

Waste from residues/not products used	Must not be released into the environment. According to local regulations dispose of. Dispose of waste in accordance with environmental regulations.
Contaminated packaging	Empty containers pose a potential fire and explosion hazard. Containers do not cutting, piercing, or welding.
European waste catalogue	16 05 04* gases containing dangerous substances in pressure vessels (including halons) 15 01 04 Metal packaging
Other information	Waste keys must be specified by the user based on the application for which the product was used.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1 UN number or ID number	**UN1950**
14.2 Proper UN shipping name	COMPRESSED GAS PACKINGS
14.3 Transport hazard classes	2
Markings	2.1
14.4 Packaging group	Not regulated
Description	UN1950, COMPRESSED GAS PACKINGS, 2, (D)
14.5 Environmental Hazards	No
14.6 Special precautions for the user	
Special regulations	190, 327, 344, 625
Classification code	5F
Tunnel restriction code	(D)
Limited Quantity (LQ)	1 L

IMDG

14.1 UN number or ID number	**UN1950**
14.2 Proper UN shipping name	COMPRESSED GAS PACKINGS
14.3 Transport hazard classes	2.1
14.4 Packaging group	Not regulated
Description	UN1950, COMPRESSED GAS PACKINGS, 2.1
14.5 Marine pollutant	NP
14.6 Special precautions for the user	**Special instructions**
	63,190, 277, 327, 344, 381, 959
Limited Quantity (LQ)	Lake SP277
EmS no.	F-D, S-U

14.7 Transport in bulk dem sea route according to IMO-instruments

Transport in bulk in accordance with Annex II of MARPOL and the IBC Code Not applicable

Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID number	**UN1950**
14.2 Proper UN shipping name	AEROSOLS, FLAMMABLE
14.3 Transport hazard classes	2.1
14.4 Packaging group	Not regulated
Description	UN1950, AEROSOLS, FLAMMABLE, 2.1
14.5 Environmental Hazards	No

Special regulations	A145, A167, A802
Limited Quantity (LQ)	30kg G
ERG code	10L

SECTION 15: Legislation

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

European Union

Check whether measures under Directive 94/33/EC on the protection of young people at work need to be taken.

Directive on the Registration, Evaluation and Authorization of Chemicals (REACH) (EC 1907/2006)

SVHC: Substance of very high concern for approval:
This product does not contain substances of very high concern (SVHC) on the candidate list at a concentration of >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

EU-REACH (1907/2006) - Annex XVII Restrictions on Use
This product does not contain any restricted substances (Regulation (EC)(No. 1907/2006, (REACH), appendix). XVII).

Substance that is subject to approval requirements according to REACH, Annex XIV
This product does not contain any substances that are subject to authorization (Regulation (EC)(No. 1907/2006, (REACH), appendix). XIV)

Requirements for issuing export licenses
This product does not contain any substances specified in Regulation (EC) No. 649/2012 of the European Parliament and the Council on the export and import of dangerous chemicals are above the threshold that requires labeling of Regulation (EC) No. 1272/2008. Therefore, this product is not subject to prior consent requirements Notification.

Category for dangerous substances according to the Seveso Directive (2012/18/EU)
P3a - FLAMMABLE AEROSOLS

Regulation on ozone-depleting substances (EC) No. 2024/590
Not applicable.

Persistent organic pollutants
Not applicable

REGULATION (EU) 2019/1148 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on Marketing and use of explosives precursors Not applicable

Regulations on drug precursors (EC) No. 111/2005 (export) and 273/2004 (domestic trade)
This product does not contain any substances that are listed as drug precursors.

Regulation (EC) No. 648/2004 on detergents
Labeling according to Regulation (EC) No. 648/2004:

aliphatic hydrocarbons	>= 30%

National regulations

Deutschland
Industrial Safety Ordinance (BetrSichV, Germany)
Not a flammable liquid according to BetrSichV

Water hazard class (WGK) slightly hazardous to water (WGK 1)

Storage class according to TRGS 510 Storage class 2B: Aerosols

Swiss VOC (%) 85.5

15.2. Chemical safety assessment

Chemical safety assessments have been carried out for substances > 10 t/a by the respective REACH registrants; for that
No chemical safety assessment has been carried out on this mixture

SECTION 16: Other information

Key or legend for abbreviations and acronyms used in the safety data sheet

Full text of all hazard and/or precautionary statements referenced in Sections 2-15
EUH066 - Repeated exposure may cause skin dryness or cracking
H220 - Extremely flammable gas
H280 - Contains gas under pressure; can explode if heated
H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H331 - Toxic if inhaled

Notes on the identification, classification and labeling of substances
Note C - Some organic substances can exist either in a well-defined isomeric form or as a mixture
several isomers are placed on the market. In this case, the supplier must indicate on the identification label whether
it is a specific isomer or a mixture of isomers
Note L - The harmonized classification as a carcinogen is made unless it can be demonstrated
that the substance contains less than 3% dimethyl sulfoxide extract, measured according to method IP 346 (·Determination of
polycyclic aromatics in unused lubricating oils and asphaltene-free petroleum fractions -
Dimethyl sulfoxide extraction refractive index method", Institute of Petroleum, London); in this case it is also for
this hazard class must be classified in accordance with Title II of this Regulation
Note U - When placed on the market, the gases must be classified as ·gases under pressure· in one of the groups of compressed gases,
of liquefied gases, frozen gases or dissolved gases. The assignment to a group
depends on the physical state in which the gas is packaged and must therefore be decided on a case-by-case basis.
The following codes are assigned: Press. Gas (Comp.), Press. Gas (Liq.), Press. Gas (Ref. Liq.), Press. Gas (Diss.).
Aerosols may not be classified as gases under pressure (see Annex I Part 2 Section 2.3.2.1 Note 2)

SVHC: Substance of very high concern for approval:
PBT: Persistent, bioaccumulative and toxic (PBT) substances
vPvB: Very persistent and very biocumulative (vPvB) substances STOT
RE: Specific Target Organ Toxicity - Repeated Exposure STOT
SE: Specific target organ toxicity - single exposure EWC:
European waste catalogue
LOW: List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm)
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IATA:
International Air Transport Association
ICAO: ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air IMDG:
Sea transport
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

Legend SECTION 8: Exposure controls/personal protection

TWA	TWA (time weighted average)	STEL	STEL (Short Term Exposure Limit, value for short-term exposure)
AGW	Occupational limit value	BGW	Biological limit
limit	Maximum limit	Sk*	Skin naming

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapors	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Corrosion/irritation to skin	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Chronic aquatic toxicity	Calculation method
Acute aquatic toxicity	Calculation method
Danger of aspiration	Calculation method
Ozone	Calculation method
Flammable aerosol	Based on test data

Authoritative literature references and sources for the data used to prepare the safety data sheet

European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Risk Assessment Committee (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
US Environmental Protection Agency
Guideline values for acute exposure (Acute Exposure Guideline Level(s), AEGL(s))
International Unified Chemical Information Database (IUCLID)
Japan National Institute of Technology and Evaluation (NITE)
NIOSH (National Institute for Occupational Safety and Health, cf. Federal Institute for Occupational Safety and Health)
International Organization for Economic Cooperation and Development (International Organization for Economic Co-operation and Development, OECD) publications on the environment, health and safety
International Organization for Economic Cooperation and Development (International Organization for Economic Co-operation and Development (OECD) program for high-volume chemicals
International Organization for Economic Cooperation and Development (International Organization for Economic Co-operation and Development, OECD) Screening Information Data Set

Manufactured by Product safety

Revised on 01-Sep-2025

Note on revision SDS sections updated 2 1

Training Notes No information is available

Further information No information is available

Safety data sheet according to Regulation (EC) No. 1907/2006 (REACH)

Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878 and Regulation (EC) No. 1272/2008 version

Disclaimer

The information provided in this safety data sheet is as of the date of publication accurate to the best of our knowledge. The information is for guidance only for safe handling, Use, processing, storage, transport, disposal and in the event of spillage are determined and apply

not as a guarantee and quality specifications. This information refers only to the explicit specified material and may when used with other materials or other processes for such

Material is not valid unless specified in the text.

End of the safety data sheet