Eni Chain Lube Spray

Safety Data Sheet

According to Regulation (EU) No. 830/2015

Revision date: 01/07/2020 Supersedes: 19/10/2015 Version: 3.0

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Eni Chain Lube Spray
Product code	:	9892
Type of product	:	Aerosol.
Formula	:	0107-2020
Product group	:	Trade product

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

1.2.1. Relevant identified uses

Main use category	:	Professional use,Industrial use,Consumer use
Industrial/Professional use spec	:	Wide dispersive use
Use of the substance/mixture	:	Maintenance and repair of motor vehicles Lubricant grease ---- Do not use the product for any purposes that have not been advised by the manufacturer.
Function or use category	:	Lubricants, Greases and Release Products

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ENI S.p.A.

P.le E. Mattei 1 - 00144 Rome Italy

Phone: (+39) 06 59821

www.eni.com

Contact:

Refining & Marketing

Competent person responsible for the Safety Data Sheet (Reg. EC nr. 1907/2006): SDSInfo@eni.com

1.4. Emergency telephone number

Emergency number	:	CNIT +39 0382 24444 (24h) (IT + EN) Poison centre (UK): National Poisons Information Service Edinburgh (24h) (+44) 844 892 0111 0870 600 6266 (UK only) (Source: UN-WHO)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aerosol, Category 2	H223;H229
Skin corrosion/irritation, Category 2	H315
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Flammable aerosol. Pressurised container: May burst if heated. Irritant to skin. Prolonged and repeated skin contact may cause reddening, irritation and dermatitis. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects. For specific information about the toxicological/ecotoxicological properties and classification of this product, see Sect. 11 and/or Sect. 12.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07 GHS09

CLP Signal word : Warning

Hazardous ingredients and/or with relevant occupational exposure limits : Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Hazard statements (CLP) :
H223 - Flammable aerosol.
H229 - Pressurised container: May burst if heated.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :
P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P261 - Avoid breathing mist, spray, vapours.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P312 - Call a POISON CENTER if you feel unwell.
P405 - Store locked up.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 - Dispose of contents and container to according to national or local regulations.

2.3. Other hazards (not relevant for classification)

Other hazards not contributing to the classification : Contains gas under pressure; may explode if heated.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Notes : Composition/ Information on ingredients:
Propellant gas
Mixture of hydrocarbons
Additives

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (Solvent)	(EC-No.) 927-510-4 (EC Index-No.) N/A (REACH-no) 01-2119475515-33	> 30 <= 50	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hydrocarbons, C4 (Propellant gas, see note [*])	(CAS-No.) 87741-01-3 (EC-No.) 289-339-5 (EC Index-No.) 649-113-00-2 (REACH-no) 01-2119480480-41	> 20 <= 30	Flam. Gas 1, H220 Press. Gas
Propane (Propellant gas)	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (EC Index-No.) 601-003-00-5 (REACH-no) 01-2119486944-21	> 10 <= 20	Flam. Gas 1, H220 Press. Gas

Notes : Note [*]:
This product contains < 0.1 % w/w of 1.3 butadiene (EINECS 203-450-8). According to the criteria laid out by the EU (nota K - Annex VI Reg (CE) 1272/2008), this product must be regarded as non-carcinogenic and non-mutagenic.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : In case of disturbances owing to inhalation of vapours or mists, remove the victim from exposure; keep at rest; if necessary, seek medical attention. Place in the recovery position. Administer oxygen if necessary. If casualty is unconscious and not breathing: ensure that there is no obstruction to breathing and give artificial respiration by trained personnel. If necessary, give external cardiac massage and obtain medical advice.

First-aid measures after skin contact : Take off contaminated clothing and shoes. Wash thoroughly with soap and water. If inflammation or irritation persists, seek medical advice.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Do not use salves or ointments, unless directed by doctor.

First-aid measures after ingestion : Not considered a likely route of exposure. IF SWALLOWED: Give activated carbon, in order to reduce the resorption in the gastro-enteric tract. Do not induce vomiting. In case of spontaneous vomiting, keep head low, to avoid the risk of aspiration into the lungs.

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

Symptoms/effects after inhalation : Inhalation may cause irritation (cough, short breathing, difficulty in breathing). Symptoms of overexposure to vapours include drowsiness, weakness, headache, dizziness, nausea, vomiting, dimming of vision.

Symptoms/effects after skin contact : Prolonged and repeated skin contact may cause reddening, irritation and dermatitis.

Symptoms/effects after eye contact : Contact with eyes may cause a light transient irritation.

Symptoms/effects after ingestion : Accidental ingestion of small quantities of the product may cause irritation, nausea and gastric disturbances. Taking into account the taste of the product, however, ingestion of dangerous quantites is very unlikely.

Symptoms/effects upon intravenous administration : No information available.

Chronic symptoms : None known.

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

Treat symptomatically. In case of massive inhalation : Obtain medical attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, or water spray or regular foam.

Unsuitable extinguishing media : Do not use water jets. They could cause splattering, and spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable aerosol. Avoid accidental sprays on hot surfaces or electrical contacts.

Explosion hazard : Pressurised container: May burst if heated. Heat may build pressure in tank and containers, rupturing closed vessels, spreading fire and increasing risk of burns and injuries. Vapours may form explosive mixture with air.

Hazardous decomposition products in case of fire : Incomplete combustion will generate poisonous carbon monoxide, carbon dioxide and other toxic gases. Oxygenated compounds (aldehydes, etc.).

5.3. Advice for firefighters

Precautionary measures fire : Do not breathe fumes. Stop leak, if safe to do so. Fight fire remotely due to the risk of explosion.

Firefighting instructions : Move undamaged containers from immediate hazard area if it can be done safely. Spilled product which is not burning should be covered with sand or foam. Use water sprays to cool containers and surfaces exposed to the flames. If the fire cannot be controlled, evacuate area.

Special protective equipment for firefighters : Personal protection equipment for firefighters (see also sect. 8). Self-contained breathing apparatus. EN 443. EN 469. EN 659.

Other information : In case of fire, do not discharge residual product, waste materials and runoff water: collect separately and use a proper treatment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak, if safe to do so. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares). Use only non-sparking tools. Avoid direct contact with released material. Keep upwind.

6.1.1. For non-emergency personnel

Protective equipment : See Section 8.

Emergency procedures : Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency.

6.1.2. For emergency responders

Protective equipment	:	Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. Work gloves (preferably gauntlets) providing adequate chemical resistance. Antistatic non-skid safety shoes or boots, chemical resistant. Work helmet. Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory protection: A half or full-face respirator with combined dust/organic vapour filter(s), or a Self-Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure.
Emergency procedures	:	Notify local authorities according to relevant regulations.

6.2. Environmental precautions

Container fitted with a sealed spray attachment. It is very unlikely to occur the spillage. In case of contamination of environment compartments (soil, subsoil, surface or underground waters), remove contaminated soil when possible, and in any case treat all involved compartments in accordance with local regulations. Do not let the product accumulate in confined or underground spaces. Do not let the product flow into sewers or water courses, or in any way contaminate the environment.

6.3. Methods and material for containment and cleaning up

For containment	:	Contain and absorb spilled liquid with absorbent inert material (for example sand, earth, vermiculite, diatomaceous earth). Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
Methods for cleaning up	:	Collect spillage. Wash contaminated area with large amounts of water.
Other information	:	Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions.

6.4. Reference to other sections

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 that all relevant regulations regarding handling and storage facilities of flammable products are followed. Do not use electrical equipment (mobile phones etc.) not approved for use, according to the risk rating of the area. Keep away from heat/sparks/open flames/hot surfaces. Use and store only outdoors or in a well-ventilated area. Before commencing any operation in a confined area (e.g. tunnels), check the atmosphere for oxygen content and flammability. Emptied containers can contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been drained and cleaned. Do not breathe fume/ mist/ vapours. Do not spray on an open flame or other ignition source. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Storage area layout, electrical equipment and wiring must comply with the relevant safety regulations, according to the specific risk rating of the area.
Hygiene measures	:	Ensure that proper housekeeping measures are in place. Do not breathe fume/ mist/ vapours. Avoid contact with skin. Do not ingest. Do not smoke. Use adequate personal protective equipment as needed. Do not re-use clothes, if they are still contaminated. Do not eat and do not drink during use. Take off immediately all contaminated clothing and wash it before reuse. Separate working clothes from town clothes. Launder separately. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Pressurized container. Keep away from direct sunlight. Do not expose to temperatures higher than 50 °C. Do not puncture or incinerate empty can. Store and use in a well-ventilated area. Store the bottle in upright position in a dark and cool place. Keep away from open flames, hot surfaces and sources of ignition. Vapours are heavier than air and spread above ground. Beware of accumulation in pits and confined spaces. Do not smoke. Protect against frost.
Incompatible products	:	Keep away from: strong oxidants. Pyrophyric or self-heating substances.
Storage area	:	Storage area layout, electrical equipment and wiring must comply with the relevant safety regulations, according to the specific risk rating of the area. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills.
Packages and containers:	:	Keep containers tightly closed and properly labelled. Empty containers may contain combustible product residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned.
Packaging materials	:	Keep only in the original container.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		
EU	IOELV TWA (mg/m³)	2085 mg/m³ (n-Heptane)
EU	IOELV TWA (ppm)	500 ppm (n-Heptane)
Austria	MAK (ppm)	500 ppm (n-Heptane)
Austria	MAK Short time value (ppm)	2000 ppm (n-Heptane)
Belgium	Limit value (ppm)	400 ppm (n-Heptane)
Belgium	Short time value (ppm)	500 ppm (n-Heptane)
Denmark	Grænseværdi (langvarig) (ppm)	200 ppm (n-Heptane)
Denmark	Grænseværdi (kortvarig) (ppm)	400 ppm (n-Heptane)
France	VME (ppm)	500 ppm (n-Heptane)
France	VLE (ppm)	400 ppm (n-Heptane)
Germany	Occupational exposure limit value (ppm)	500 ppm (n-Heptane)
Germany	Limitation of exposure peaks (ppm)	500 ppm (n-Heptane)
Ireland	OEL (8 hours ref) (ppm)	500 ppm (n-Heptane)
Italy	OEL TWA (ppm)	500 ppm (Dlgs 81/2008, n-heptane)
Latvia	OEL TWA (ppm)	85 ppm (n-Heptane)
Netherlands	MAC TGG 8h (mg/m³)	1200 mg/m³ (n-Heptane)
Netherlands	MAC TGG 15 min (mg/m³)	1600 mg/m³ (n-Heptane)
Spain	VLA-ED (ppm)	500 ppm (heptanes)
Spain	VLA-EC (ppm)	2085 ppm (heptanes)
Sweden	Nivågränsvärde (NVG) (ppm)	200 ppm (n-Heptane)
Sweden	Kortidsvärde (KTV) (ppm)	300 ppm (n-Heptane)
United Kingdom	WEL TWA (ppm)	500 ppm (n-Heptane)
Switzerland	MAK (ppm)	400 ppm (n-Heptane)
Switzerland	VLE (ppm)	400 ppm (n-Heptane)
Canada (Quebec)	VECD (ppm)	300 ppm (n-Heptane)
Canada (Quebec)	VEMP (ppm)	500 ppm (n-Heptane)
USA - ACGIH	ACGIH TLV®-TWA (ppm)	400 ppm (heptanes)
USA - ACGIH	ACGIH TLV®-STEL (ppm)	500 ppm (heptanes)

Hydrocarbons, C4 (87741-01-3)		
Austria	MAK (ppm)	800 ppm (Butane)
Austria	MAK Short time value (ppm)	1600 ppm (Butane)
Belgium	Limit value (ppm)	>= 800 ppm (Butane)
Denmark	Grænseværdi (langvarig) (ppm)	500 ppm (Butane)
Denmark	Grænseværdi (kortvarig) (ppm)	1000 ppm (Butane)
Finland	HTP-arvo (8h) (ppm)	800 ppm (Butane)
Finland	HTP-arvo (15 min) (ppm)	1000 ppm (Butane)
Germany	Occupational exposure limit value (ppm)	1000 ppm (Butane)
Germany	Limitation of exposure peaks (ppm)	4000 ppm (Butane)
Hungary	AK-érték	2350 mg/m³ (Butane)
Poland	NDS (mg/m³)	1900 mg/m³ (Butane)
Poland	NDSCh (mg/m³)	3000 mg/m³ (Butane)
United Kingdom	WEL TWA (ppm)	600 ppm (Butane)
United Kingdom	WEL STEL (ppm)	750 ppm (Butane)
Switzerland	MAK (ppm)	800 ppm (Butane)
USA - ACGIH	ACGIH TLV®-STEL (mg/m³)	2377 mg/m³ (Butane)
USA - ACGIH	ACGIH TLV®-STEL (ppm)	1000 ppm (Butane)
USA - NIOSH	NIOSH REL (TWA) (ppm)	800 ppm (Butane)

Propane (74-98-6)		
Austria	MAK (mg/m³)	1800 mg/m³
Austria	MAK (ppm)	1000 ppm
Austria	MAK Short time value (mg/m³)	3600 mg/m³
Austria	MAK Short time value (ppm)	2000 ppm
Belgium	Limit value (ppm)	1000 ppm
Denmark	Grænseværdi (langvarig) (mg/m³)	1800 mg/m³

Propane (74-98-6)		
Denmark	Grænseværdi (langvarig) (ppm)	1000 ppm
Denmark	Grænseværdi (kortvarig) (mg/m³)	3600 mg/m³
Denmark	Grænseværdi (kortvarig) (ppm)	2000 ppm
Finland	HTP-arvo (8h) (mg/m³)	1500 mg/m³
Finland	HTP-arvo (8h) (ppm)	800 ppm
Finland	HTP-arvo (15 min) (mg/m³)	2000 mg/m³
Finland	HTP-arvo (15 min) (ppm)	1100 ppm
Germany	Occupational exposure limit value (mg/m³)	1800 mg/m³
Germany	Occupational exposure limit value (ppm)	1000 ppm
Germany	Limitation of exposure peaks (mg/m³)	7200 mg/m³
Germany	Limitation of exposure peaks (ppm)	4000 ppm
Poland	NDS (mg/m³)	1800 mg/m³
Spain	VLA-ED (ppm)	1000 ppm
Switzerland	MAK (mg/m³)	1800 mg/m³
Switzerland	MAK (ppm)	1000 ppm
Switzerland	VLE (mg/m³)	7200 mg/m³
Switzerland	VLE (ppm)	4000 ppm
USA - ACGIH	ACGIH TLV®-TWA (ppm)	1000 ppm (Alkanes, C1-C4)
USA - NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m³ (Butane)
USA - NIOSH	NIOSH REL (TWA) (ppm)	800 ppm (Butane)
USA - OSHA	OSHA PEL (TWA) (ppm)	1000 ppm LPG (Liquefied Petroleum Gas)
USA - OSHA	OSHA PEL (STEL) (mg/m³)	1800 mg/m³ LPG (Liquefied Petroleum Gas)

Monitoring methods	
Monitoring methods	Monitoring procedures should be chosen according to the indications set by national authorities or labour contracts,Refer to relevant legislation and in any case to the good practice of industrial hygiene.

Eni Chain Lube Spray	
DNEL/DMEL (additional information)	
Additional information	Not applicable
PNEC (additional information)	
Additional information	Not applicable

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	300 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2085 mg/m³/day
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	149 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	447 mg/m³/day
Long-term - systemic effects, dermal	149 mg/kg bodyweight/day
PNEC (additional information)	
Additional information	Not applicable (UVCB)

Propane (74-98-6)	
DNEL/DMEL (additional information)	
Additional information	Not derived - Not classified as hazardous for health
PNEC (additional information)	
Additional information	Not derived - Not classified as hazardous for environment. The product is a gas and is extremely unlikely to reside in the aquatic compartment.

Note	:	The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accord with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a governmental regulatory body or an expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH.

8.2. Exposure controls

Appropriate engineering controls:

Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean-up, and check the atmosphere for oxygen content and flammability. Ensure that there is a suitable ventilation system.

Personal protective equipment (for industrial or professional use):

Safety glasses. Protective clothing. Safety shoes or boots.

Materials for protective clothing:

Cotton or cotton/synthetic overalls or coveralls are normally suitable

Hand protection:

Wear suitable gloves tested to EN374. Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immediately in case of cuts, holes or other signs of damages or degradation. If necessary, refer to the EN 374 standard.

Eye protection:

Chemical goggles or safety glasses. EN 166

Skin and body protection:

Long-sleeved overalls. If necessary, refer to the EN 340 and related standards, for definition of characteristics and performance according to the risk rating of the area. Antistatic non-skid safety shoes or boots, chemical resistant.

Respiratory protection:

Not necessary with sufficient ventilation. In case of insufficient ventilation, wear suitable respiratory equipment (EN 136/140/145). Combined gas/dust mask with filter type: EN 14387. Recommended: Filter AX (brown).

Personal protective equipment symbol(s):

Thermal hazard protection:

None in normal use conditions.

Environmental exposure controls:

Do not discharge the product into the environment. Do not apply industrial sludge to natural soils. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Sludge should be incinerated, contained or reclaimed. Prevent discharge of undissolved substance to or recover from onsite wastewater.

Consumer exposure controls:

Not applicable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Aerosol.
Colour	:	dark.
Odour	:	Solvent.
Odour threshold	:	There are no data available on the preparation/mixture itself.
pH	:	Not applicable.
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	-80 °C (ASTM D 1177)
Boiling point	:	Not available

Flash point	:	>= 30 °C
Critical temperature	:	Not applicable for mixtures
Auto-ignition temperature	:	400 °C (DIN 51794)
Decomposition temperature	:	Not available
Flammability (solid, gas)	:	Flammable aerosol.
Vapour pressure	:	3,2 bar (20°C)
Critical pressure	:	Not applicable for mixtures
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	0,67 g/l (20°C, A.I.A. 43.010)
Solubility	:	Soluble in: Petroleum distillates. Water: Insoluble
Log Pow	:	Not applicable for mixtures
Log Kow	:	Not applicable for mixtures
Viscosity, kinematic	:	50 mm²/s (ASTM D 445)
Viscosity, dynamic	:	No data available
Explosive properties	:	Pressurised container: May burst if heated.
Oxidising properties	:	None (according to composition).
Lower explosive limit (LEL)	:	1,8 vol %
Upper explosive limit (UEL)	:	9,5 vol %

9.2. Other information

Additional information : No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable aerosol. Pressurised container: May burst if heated.

10.2. Chemical stability

Stable product, according to its intrinsic properties (in normal conditions of storage and handling). Heating may cause a fire or explosion.

10.3. Possibility of hazardous reactions

None (in normal conditions of storage and handling). Heating may cause a fire or explosion. Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard.

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Avoid the build-up of electrostatic charge.

10.5. Incompatible materials

Strong oxidants.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : Toxic fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	:	Not classified (Based on available data, the classification criteria are not met)
Additional information	:	(according to composition)

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
LD50 oral rat	> 5000 mg/kg (OECD 401)
LD50 dermal rabbit	> 2000 mg/kg (OECD 402)
LC50 inhalation rat (mg/l)	> 20 mg/l (OECD 403)

Propane (74-98-6)	
LC50 inhalation rat (mg/l)	1442 - 1443 mg/m³ (15 min)

Skin corrosion/irritation	:	Causes skin irritation. pH: Not applicable.
Additional information	:	(according to composition)

Serious eye damage/irritation	:	Not classified (Based on available data, the classification criteria are not met) pH: Not applicable.
Additional information	:	(according to composition)
Respiratory or skin sensitisation	:	Not classified (Based on available data, the classification criteria are not met)
Additional information	:	(according to composition)
Germ cell mutagenicity	:	Not classified (Based on available data, the classification criteria are not met)
Additional information	:	(according to composition) This product contains < 0.1 %wt of 1.3 butadiene (EINECS 203-450-8) (note K - Annex VI Reg (CE) 1272/2008) Not mutagenic
Carcinogenicity	:	Not classified (Based on available data, the classification criteria are not met)
Additional information	:	(according to composition) This product contains < 0.1 % wt of 1.3 butadiene (EINECS 203-450-8). According to the criteria laid out by the EU, this product must be regarded as non carcinogenic.
Reproductive toxicity	:	Not classified (Based on available data, the classification criteria are not met)
Additional information	:	(according to composition)
STOT-single exposure	:	May cause drowsiness or dizziness.
Additional information	:	(according to composition) Overexposure to vapours (e.g. through prolonged use in confined, insufficiently ventilated spaces) may cause irritation to airways, nausea and dizziness.

Propane (74-98-6)	
LOAEC (inhalation, rat, gas)	12000 ppmv/4h
NOAEC (inhalation, rat, gas)	4000 - 16000 ppmv/4h

STOT-repeated exposure	:	Not classified (Based on available data, the classification criteria are not met)
Additional information	:	(according to composition)

Propane (74-98-6)	
LOAEC (inhalation, rat, gas, 90 days)	12000 ppmv/6h/day
NOAEC (inhalation, rat, gas, 90 days)	9000 ppmv/6h/day (Sprague-Dawley CD) - male/female

Aspiration hazard	:	Not classified. (Based on available data, the classification criteria are not met)
Additional information	:	(according to composition)

Eni Chain Lube Spray	
Viscosity, kinematic	50 mm²/s (ASTM D 445)

Potential adverse human health effects and symptoms	:	Contact with eyes may cause temporary reddening and irritation. Prolonged and repeated skin contact may cause reddening, irritation and dermatitis. High concentration of vapours may induce: headache, nausea, dizziness.
Other information	:	None.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. An uncontrolled release to the environment may nevertheless produce a contamination of different environmental compartments (air, soil, underground, surface water bodies, aquifers). Handle according to general working hygiene practices to avoid pollution and release into the environment. Notify authorities if product enters sewers or public waters.
Ecology - water	:	This product is not soluble in water.
Ecology - water	:	Toxic to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	:	Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	:	Toxic to aquatic life with long lasting effects.

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
LC50 fish 1	> 13,4 mg/l (LL50, 96h - OECD 203)
EC50 Daphnia 1	3 mg/l (EL50, 48h - Read across)
ErC50 (algae)	12 mg/l (EL50, 72h - OECD 201 Read across)

Propane (74-98-6)	
LC50 fish 1	49,9 mg/l
EC50 Daphnia 1	27,1 mg/l
EC50 72h algae (1)	11,9 mg/l

12.2. Persistence and degradability

Eni Chain Lube Spray	
Persistence and degradability	Product is biodegradable with difficulty.

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
Persistence and degradability	The product should be considered as "Not persistent" in the environment, according to the REACH Annex XIII criteria (point 1.1).
Biodegradation	98 % (28d - OECD 301 F Read across)

Propane (74-98-6)	
Persistence and degradability	Readily biodegradable.
Biodegradation	100 % (16d. QSAR Read-Across)

12.3. Bioaccumulative potential

Eni Chain Lube Spray	
Log Pow	Not applicable for mixtures
Log Kow	Not applicable for mixtures
Bioaccumulative potential	Bioaccumulation unlikely.

Propane (74-98-6)	
Bioconcentration factor (BCF REACH)	1,56
Log Kow	2,36
Bioaccumulative potential	Low bioaccumulation potential.

12.4. Mobility in soil

Eni Chain Lube Spray	
Ecology - soil	No data available.

Propane (74-98-6)	
Ecology - soil	Product is easily volatile. No indication of bioaccumulation potential.

12.5. Results of PBT and vPvB assessment

Eni Chain Lube Spray	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
Results of PBT-vPvB assessment	The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product should be considered as "Not persistent" in the environment, according to the REACH Annex XIII criteria (point 1.1)

Component	
Propane (74-98-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics ()	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of empty containers and wastes safely. Do not dispose of the product, either new or used, by discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.

Sewage disposal recommendations : Dispose of in a safe manner in accordance with local/national regulations. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Product/Packaging disposal recommendations : European Waste Catalogue code(s) (Decision 2001/118/CE): waste organic solvents, refrigerants and foam/aerosol propellants, 15 01 10* (packaging containing residues of or contaminated by dangerous substances), 16 05 04* (gases in pressure containers (including halons) containing dangerous substances). This EWC code is only a general indication, and takes into account the original composition of the product and its intended use. The user has the responsibility of choosing the right EWC code, considering the actual use of the product, alterations and contaminations. waste organic solvents, refrigerants and foam/aerosol propellants.

Additional information : Empty containers may contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been cleaned, and declared safe.

Ecology - waste materials : The product as it is does not contain halogenated substances.

EURAL code (EWC) : 14 06 00 - waste organic solvents, refrigerants and foam/aerosol propellants
15 01 10* - packaging containing residues of or contaminated by dangerous substances
16 05 04* - Gases in pressure containers (including halons) containing dangerous substances

H code	:	HP3 - "Flammable:" — flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; — flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; — flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; — flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; — water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; — other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP4 - "Irritant — skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

In accordance with ADN / ADR / IATA / IMDG / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1950	1950	1950	1950	1950
14.2. UN proper shipping name				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
Transport document description				
UN 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1950 Aerosols, flammable, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	2.1
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
None.				

14.6. Special precautions for user

- Overland transport

Transport regulations (ADR)	:	Subject to the provisions
Limited quantities (ADR)	:	1l
Excepted quantities (ADR)	:	E0

- Transport by sea

Transport regulations (IMDG)	:	Subject to the provisions
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
EmS-No. (Fire)	:	F-D
EmS-No. (Spillage)	:	S-U

- Air transport

Transport regulations (IATA)	:	Subject to the provisions
PCA Excepted quantities (IATA)	:	E0
PCA limited quantity max net quantity (IATA)	:	30kgG

- Inland waterway transport

Transport regulations (ADN)	:	Subject to the provisions
Limited quantities (ADN)	:	1 L
Excepted quantities (ADN)	:	E0

- Rail transport

Transport regulations (RID)	:	Subject to the provisions
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E0
Transport category (RID)	:	2

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

IBC code : Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	Eni Chain Lube Spray - Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Eni Chain Lube Spray - Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	Eni Chain Lube Spray - Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	Propane - Hydrocarbons, C4 - Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

No ingredients are included in the REACH Candidate list (> 0,1 % m/m).

Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations : Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). (et sequens). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (et sequens). Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE, 99/38/CE, 99/92/CE, 2001/45/CE, 2003/10/CE, 2003/18/CE (Health and safety on the workplace). Directive 2012/18/CE (Control of major-accident hazards involving dangerous substances). Directive 2004/42/CE (Limitation of emissions of Volatile Organic Compounds). Directive 98/24/EC (protection of the health and safety of workers from the risks related to chemical agents at work). Directive 92/85/CE (measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding). Substances Depleting the Ozone layer (1005/2009) - Annex I Substances (ODP). Regulation EU (649/2012) - Export and Import of hazardous chemicals (PIC). Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants.

Seveso Information : Seveso Category: P3a-E2

15.1.2. National regulations

National adoption of EU Directives concerning health and safety on the workplace.
National adoption of EU Directives concerning control of major-accident hazards involving dangerous substances (2012/18/CE).
Relevant national laws on prevention of water pollution.
Relevant national laws on protection of the health of pregnant workers (National adoption of Dir. 92/85/EEC).
National adoption of Directives 75/439/CEE - 87/101/CEE concerning disposal of used oils.

Germany

Reference to AwSV : Water hazard class (WGK) (D) 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

WGK remark	:	Classification is carried out on the basis of the Ordinance on facilities for handling substances that are hazardous to water (Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV)) of 18 April 2017 (BGBl 2017, Teil I, Nr. 22, Seite 905).
VbF class (D)	:	Not applicable.
Storage class (LGK) (D)	:	LGK 2B - Aerosols
Employment restrictions	:	Employment prohibitions and restrictions according to § 11 and § 12 MuSchG have to be observed.
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	:	Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
Other information, restrictions and prohibition regulations	:	TRGS 400: Hazard assessment for activities involving Hazardous Substances TRGS 401: Risks resulting from skin contact - identification, assessment, measures TRGS 402: Identification and Assessment of the Risks from Activities involving Hazardous Substances: Inhalation Exposure TRGS 500: Protective measures TRGS 555: Working instruction and information for workers TRGS 725: Portable compressed-gas tanks - filling, keeping, internal transporting, emptying TRGS 800: Fire protection measures TRGS 900: Occupational Exposure Limits

Netherlands

Waterbezwaarlijkheid	:	7 - Toxic to aquatic organisms 6 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
Saneringsinspanningen	:	C - Minimize discharge
SZW-lijst van kankerverwekkende stoffen	:	None of the components are listed
SZW-lijst van mutagene stoffen	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	Propane is listed

Denmark

Classification remarks	:	Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations	:	Young people under 18 years are not allowed to use the product

15.2. Chemical safety assessment

A chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Indication of changes:

SECTION 1 : Identification of the substance/mixture and of the company/undertaking. SECTION 2 : Hazards identification. SECTION 3 : Composition/information on ingredients. SECTION 4 : First aid measures. SECTION 5: Firefighting measures. SECTION 6: Accidental release measures. SECTION 7 : Precautions for safe handling. SECTION 8 : Exposure controls/personal protection. SECTION 9: Physical and chemical properties. SECTION 10: Stability and reactivity. SECTION 11: Toxicological information. SECTION 12: Ecological information. SECTION 13: Disposal considerations. SECTION 14: Transport information. SECTION 15: Regulatory information. SECTION 16: Other information.

Abbreviations and acronyms:

	Complete text of the H phrases quoted in this Safety Data Sheet. These phrases are reported here for information only, and MAY NOT correspond to the classification of the product.
	N/A = not applicable
	N/D = not available
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Effective concentration for 50 percent of test population (median effective concentration)
IARC	International Agency for Research on Cancer

IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Lethal concentration for 50 percent of test population (median lethal concentration)
LD50	Lethal dose for 50 percent of test population (median lethal dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals, Regulation (EC) No 1907/2006
RID	Regulation concerning the International Carriage of Dangerous Goods by Railways
SDS	Safety Data Sheet
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative

Data sources : This Safety Data Sheet is based on the characteristics of the component(s), according to the information provided by the supplier(s).

Training advice : Provide adequate training to professional operators for the use of PPEs, according to the information contained in this Safety Data Sheet.

Other information : Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Do not use the product for any purposes that have not been advised by the manufacturer.

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Gas 1	Flammable gases, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Press. Gas	Gases under pressure
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H220	Extremely flammable gas.
H223	Flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Aerosol 2	H223;H229	On basis of test data:
Skin Irrit. 2	H315	Calculation method
STOT SE 3	H336	Calculation method
Aquatic Chronic 2	H411	Calculation method

SDS EU (REACH Annex II)

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.