

# SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830

## CHAIN LUBE H1

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

#### 1.1. Product identifier

Product name : CHAIN LUBE H1  
Registration number REACH : Not applicable (mixture)  
Product type REACH : Mixture

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

##### 1.2.1 Relevant identified uses

Lubricating grease

##### 1.2.2 Uses advised against

No uses advised against known

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

##### Supplier of the safety data sheet

Novatio\*  
Industrielaan 5B  
B-2250 Olen  
☎ +32 14 25 76 40  
☎ +32 14 22 02 66  
info@novatio.be  
\*NOVATIO is a registered trademark of Novatech International N.V.

##### Manufacturer of the product

Novatech International N.V.  
Industrielaan 5B  
B-2250 Olen  
☎ +32 14 85 97 37  
☎ +32 14 85 97 38  
info@novatech.be

#### 1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :  
+32 14 58 45 45 (BIG)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Aerosol	category 1	H222: Extremely flammable aerosol.
Aerosol	category 1	H229: Pressurised container: May burst if heated.

#### 2.2. Label elements



Signal word Danger

##### H-statements

H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.

##### P-statements

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.  
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

#### 2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard

# CHAIN LUBE H1

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
petroleum gases, liquefied	68476-85-7 270-704-2	60% <C<100%	Flam. Gas 1; H220 Press. Gas - Liquefied gas;	(1)(2)(10)	Propellant
hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics 01-2119456377-30		10%<C<30%	Asp. Tox. 1; H304	(1)(10)	Constituent
hydrocarbons, C11-C13, isoalkanes, < 2% aromatics 01-2119456810-40		1%<C<5%	Asp. Tox. 1; H304	(1)(10)	Constituent

(1) For H- and EUH-statements in full: see heading 16

(2) Substance with a Community workplace exposure limit

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General:

If you feel unwell, consult a doctor/medical service.

#### After inhalation:

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

#### After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water.

#### After eye contact:

Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

#### After ingestion:

Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

#### 4.2.1 Acute symptoms

##### After inhalation:

EXPOSURE TO HIGH CONCENTRATIONS: Dizziness. Narcosis.

##### After skin contact:

No effects known.

##### After eye contact:

No effects known.

##### After ingestion:

No effects known.

#### 4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### 5.1.1 Suitable extinguishing media:

Small fire: Water, Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting CO2 extinguisher.

Major fire: Quantities of water.

### 5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO2 are formed. Pressurised container: May burst if heated.

### 5.3. Advice for firefighters

#### 5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistent risk of physical explosion.

#### 5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

# CHAIN LUBE H1

## SECTION 6: Accidental release measures

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

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

#### 6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

#### 6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See heading 8.2

### 6.2. Environmental precautions

Contain released product. Dam up the liquid spill.

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

Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

### 6.4. Reference to other sections

See heading 13.

## SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 7.1. Precautions for safe handling

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Gas/vapour heavier than air at 20°C. Observe normal hygiene standards.

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

#### 7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Meet the legal requirements. Store in a cool area. Keep container in a well-ventilated place. Fireproof storeroom. Keep out of direct sunlight. Protect against frost.

#### 7.2.2 Keep away from:

Heat sources, ignition sources, oxidizing agents.

#### 7.2.3 Suitable packaging material:

Aerosol.

#### 7.2.4 Non suitable packaging material:

No data available

### 7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 Occupational exposure

##### a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

##### Belgium

Pétrole (gaz liquéfié)	Time-weighted average exposure limit 8 h	1000 ppm
	Time-weighted average exposure limit 8 h	1826 mg/m <sup>3</sup>

##### The Netherlands

Olienevel (minerale olie)	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	5 mg/m <sup>3</sup>
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##### UK

Liquefied petroleum gas	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1000 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1750 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	1250 ppm
	Short time value (Workplace exposure limit (EH40/2005))	2180 mg/m <sup>3</sup>

##### b) National biological limit values

If limit values are applicable and available these will be listed below.

#### 8.1.2 Sampling methods

If applicable and available it will be listed below.

#### 8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

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3 / 13

# CHAIN LUBE H1

## 8.1.4 Threshold values

If applicable and available it will be listed below.

## 8.1.5 Control banding

If applicable and available it will be listed below.

## 8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 8.2.1 Appropriate engineering controls

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly.

### 8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

#### a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

#### b) Hand protection:

Protective gloves against chemicals (EN 374).

#### c) Eye protection:

Protective goggles (EN 166).

#### d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

### 8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical form	Aerosol
Odour	Hydrocarbon odour
Odour threshold	No data available in the literature
Colour	No data available on colour
Particle size	Not applicable (aerosol)
Explosion limits	1.4 - 10.9 vol % ; Propellant
Flammability	Extremely flammable aerosol.
Log Kow	Not applicable (mixture)
Dynamic viscosity	Not applicable (aerosol)
Kinematic viscosity	Not applicable (aerosol)
Melting point	No data available in the literature
Boiling point	-40 °C - -2 °C ; Propellant
Evaporation rate	No data available in the literature
Relative vapour density	No data available in the literature
Vapour pressure	5900 hPa - 17600 hPa ; Propellant
Solubility	Water ; insoluble
Relative density	No data available in the literature
Decomposition temperature	No data available in the literature
Auto-ignition temperature	Not applicable (aerosol)
Flash point	Not applicable (aerosol)
Explosive properties	Not classified
Oxidising properties	Not classified
pH	No data available in the literature

### 9.2. Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

### 10.2. Chemical stability

Unstable on exposure to heat.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

#### Precautionary measures

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

### 10.5. Incompatible materials

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Product number: 45855

4 / 13

# CHAIN LUBE H1

Oxidizing agents.

## 10.6. Hazardous decomposition products

Upon combustion: CO and CO<sub>2</sub> are formed.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### 11.1.1 Test results

##### Acute toxicity

###### CHAIN LUBE H1

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 423	> 15000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 3160 ml/kg bw	24 h	Rabbit (male / female)	Experimental value	
Inhalation (aerosol)	LC50	Equivalent to OECD 403	> 5.6 mg/l air	4 h	Rat (male / female)	Experimental value	

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 5000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	≥ 3160 mg/kg bw	24 h	Rabbit (male / female)	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 5000 mg/m <sup>3</sup> air	8 h	Rat (male)	Experimental value	

##### Conclusion

Not classified for acute toxicity

##### Corrosion/irritation

###### CHAIN LUBE H1

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		1; 24; 48; 72 hours	Rabbit	Read-across	
Skin	Not irritating	Equivalent to OECD 404	4 h	24; 48; 72 hours	Rabbit	Read-across	

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		24; 72 hours	Rabbit	Read-across	Single treatment without rinsing
Skin	Not irritating	Equivalent to OECD 404	4 h	24; 48; 72 hrs; 14 days	Rabbit	Read-across	

##### Conclusion

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

Not classified as irritating to the skin

##### Respiratory or skin sensitisation

###### CHAIN LUBE H1

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406		24; 48 hours	Guinea pig (female)	Read-across	

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Date of revision: 2020-09-20

Revision number: 0401

Product number: 45855

5 / 13

# CHAIN LUBE H1

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406			Guinea pig (male / female)	Read-across	

## Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

## Specific target organ toxicity

### CHAIN LUBE H1

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (diet)	NOAEL	Equivalent to OECD 408	> 3000 mg/kg bw/day		No effect	13 weeks (daily)	Rat (male / female)	Read-across
Dermal								Data waiving
Inhalation (vapours)	NOAEC	Equivalent to OECD 413	> 10400 mg/m <sup>3</sup> air		No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	NOAEL	Equivalent to OECD 422	≥ 1000 mg/kg bw/day		No effect	> 14 days (gestation, daily)	Rat (male / female)	
Dermal								Data waiving
Inhalation (vapours)	NOAEC	Equivalent to OECD 413	≥ 10400 mg/m <sup>3</sup>		No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across

## Conclusion

Not classified for subchronic toxicity

## Mutagenicity (in vitro)

### CHAIN LUBE H1

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Chinese hamster lung fibroblasts (V79)	No effect	Read-across	
Negative	OECD 471	Bacteria (S.typhimurium)	No effect	Read-across	
Negative	Equivalent to OECD 479	Chinese hamster ovary (CHO)	No effect	Read-across	
Negative	Equivalent to OECD 473	Human lymphocytes	No effect	Read-across	

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

Result	Method	Test substrate	Effect	Value determination	Remark
Negative	OECD 471	Bacteria (S.typhimurium)		Read-across	
Negative	Equivalent to OECD 473	Human lymphocytes		Read-across	

## Mutagenicity (in vivo)

### CHAIN LUBE H1

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 474		Mouse (male / female)	Bone marrow	Read-across
Negative	Equivalent to OECD 478	5 days (6h / day)	Rat (male / female)		Experimental value

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 474		Mouse (male / female)		Read-across

## Conclusion

Not classified for mutagenic or genotoxic toxicity

## Carcinogenicity

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Product number: 45855

6 / 13

# CHAIN LUBE H1

## CHAIN LUBE H1

No (test) data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	> 2200 mg/m <sup>3</sup> air	105 weeks (6h / day, 5 days / week)	Rat (female)	No carcinogenic effect		Experimental value
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	138 mg/m <sup>3</sup> air	105 weeks (6h / day, 5 days / week)	Rat (male)		Kidney	Experimental value
Dermal								Data waiving
Oral								Data waiving

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	≥ 2200 mg/m <sup>3</sup> air	105 weeks (6h / day, 5 days / week)	Rat (female)	No carcinogenic effect		Read-across
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	138 mg/m <sup>3</sup> air	105 weeks (6h / day, 5 days / week)	Rat (male)	No carcinogenic effect		Read-across

### Conclusion

Not classified for carcinogenicity

## Reproductive toxicity

### CHAIN LUBE H1

No (test) data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	≥ 5220 mg/m <sup>3</sup> air	10 day(s)	Rat	No effect		Experimental value
Maternal toxicity	NOAEL	Equivalent to OECD 414	> 5220 mg/m <sup>3</sup> air	10 day(s)	Rat	No effect		Experimental value
Effects on fertility	NOAEL	Equivalent to OECD 415	≥ 1500	13 weeks (daily)	Rat (female)	No effect		Read-across

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	≥ 5220 mg/m <sup>3</sup> air	10 days (gestation, 6h / day)	Rat (female)	No effect		Experimental value
Maternal toxicity	NOAEL	Equivalent to OECD 414	≥ 5220 mg/m <sup>3</sup> air	10 days (gestation, 6h / day)	Rat	No effect		Experimental value
Effects on fertility	NOAEC	Equivalent to OECD 413	≥ 400 ppm	14 weeks (6h / day, 5 days / week)	Rat (male / female)	No effect		Read-across

### Conclusion

Not classified for reprotoxic or developmental toxicity

## Toxicity other effects

### CHAIN LUBE H1

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Skin dryness or cracking			Literature study Skin

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Skin dryness or cracking			Literature study Skin

## Chronic effects from short and long-term exposure

### CHAIN LUBE H1

Dry skin.

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7 / 13

# CHAIN LUBE H1

## SECTION 12: Ecological information

### 12.1. Toxicity

#### CHAIN LUBE H1

No (test) data on the mixture available

Judgement of the mixture is based on the relevant ingredients

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	Other	> 88444 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EL50	OECD 202	> 1000 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EL50	OECD 201	> 1000 mg/l	72 h	Pseudokirchneriella subcapitata	Static system		Experimental value; GLP
Long-term toxicity fish	NOELR		> 1000 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR; Growth rate
Long-term toxicity aquatic crustacea	NOELR	OECD 211	1 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Read-across; GLP
Toxicity aquatic micro-organisms	EL50		> 1000 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR; Growth inhibition

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	> 1000 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Read-across; GLP
Acute toxicity crustacea	EL50	OECD 202	> 1000 mg/l	48 h	Daphnia magna	Static system	Fresh water	Read-across; GLP
Toxicity algae and other aquatic plants	EL50	OECD 201	> 1000 mg/l	72 h	Pseudokirchneriella subcapitata	Static system		Read-across; GLP
	NOELR	OECD 201	1000 mg/l	72 h	Pseudokirchneriella subcapitata	Static system		Read-across; GLP
Long-term toxicity fish	NOELR		0.217 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	Calculated value; Growth rate
Long-term toxicity aquatic crustacea	NOELR	OECD 211	1 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP
Toxicity aquatic micro-organisms	EL50		> 1000 mg/l	48 h	Tetrahymena pyriformis		Fresh water	Calculated value; Growth inhibition

No classification for aquatic toxicity since the toxicity limits are above the water solubility

#### Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

### 12.2. Persistence and degradability

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

#### Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	76.6 %; Oxygen consumption	28 day(s)	Experimental value

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

#### Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	80 %; Oxygen consumption	28 day(s)	Read-across

#### Biodegradation soil

Method	Value	Duration	Value determination
			Data waiving

#### Conclusion

##### Water

Contains non readily biodegradable component(s)

### 12.3. Bioaccumulative potential

#### CHAIN LUBE H1

##### Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			



# CHAIN LUBE H1

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

## BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.00	144.3 l/kg			Calculated value

## Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

## BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.00	144.3 l/kg			QSAR

## BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
					Data waiving

## Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

## Conclusion

Does not contain bioaccumulative component(s)

## 12.4. Mobility in soil

hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics

### (log) Koc

Parameter	Method	Value	Value determination
log Koc		4.16	Calculated value

### Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	59.7 %	0 %	26.8 %	12.1 %	1.4 %	Calculated value

hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

### (log) Koc

Parameter	Method	Value	Value determination
log Koc		4.16	Calculated value

### Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	15.2 %	0 %	55 %	26.3 %	3.5 %	Calculated value

## Conclusion

Contains component(s) that adsorb(s) into the soil

## 12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

## 12.6. Other adverse effects

### CHAIN LUBE H1

#### Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

#### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

## SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 13.1. Waste treatment methods

#### 13.1.1 Provisions relating to waste

##### European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

12 01 12\* (wastes from shaping and physical and mechanical surface treatment of metals and plastics: spent waxes and fats). Depending on branch of industry and production process, also other waste codes may be applicable.

#### 13.1.2 Disposal methods

Specific treatment. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

#### 13.1.3 Packaging/Container

##### European Union

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Revision number: 0401

Product number: 45855

9 / 13

# CHAIN LUBE H1

Waste material code packaging (Directive 2008/98/EC).  
15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

## SECTION 14: Transport information

### Road (ADR)

14.1. UN number	
UN number	1950
14.2. UN proper shipping name	
Proper shipping name	Aerosols
14.3. Transport hazard class(es)	
Hazard identification number	
Class	2
Classification code	5F
14.4. Packing group	
Packing group	
Labels	2.1
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

### Rail (RID)

14.1. UN number	
UN number	1950
14.2. UN proper shipping name	
Proper shipping name	Aerosols
14.3. Transport hazard class(es)	
Hazard identification number	23
Class	2
Classification code	5F
14.4. Packing group	
Packing group	
Labels	2.1
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

### Inland waterways (ADN)

14.1. UN number	
UN number	1950
14.2. UN proper shipping name	
Proper shipping name	Aerosols
14.3. Transport hazard class(es)	
Class	2
Classification code	5F
14.4. Packing group	
Packing group	
Labels	2.1
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

### Sea (IMDG/IMSBC)

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Product number: 45855

10 / 13

# CHAIN LUBE H1

14.1. UN number	UN number	1950
14.2. UN proper shipping name	Proper shipping name	aerosols
14.3. Transport hazard class(es)	Class	2.1
14.4. Packing group	Packing group	
	Labels	2.1
14.5. Environmental hazards	Marine pollutant	P
	Environmentally hazardous substance mark	no
14.6. Special precautions for user	Special provisions	190
	Special provisions	277
	Special provisions	327
	Special provisions	344
	Special provisions	381
	Special provisions	63
	Special provisions	959
	Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	Annex II of MARPOL 73/78	Not applicable

## Air (ICAO-TI/IATA-DGR)

14.1. UN number	UN number	1950
14.2. UN proper shipping name	Proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	Class	2.1
14.4. Packing group	Packing group	
	Labels	2.1
14.5. Environmental hazards	Environmentally hazardous substance mark	no
14.6. Special precautions for user	Special provisions	A145
	Special provisions	A167
	Special provisions	A802
Passenger and cargo transport	Limited quantities: maximum net quantity per packaging	30 kg G

## SECTION 15: Regulatory information

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

#### European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
61 % - 100 %	

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics · hydrocarbons, C11-C13, isoalkanes, < 2% aromatics	Liquid 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: (a) 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; (b) 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; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements

Reason for revision: 9.2

Publication date: 2008-03-03

Date of revision: 2020-09-20

Revision number: 0401

Product number: 45855

11 / 13

# CHAIN LUBE H1

are met:

- a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage";
- b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage";
- c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled H304, intended for supply to the general public.
7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'

## National legislation Belgium

### CHAIN LUBE H1

No data available

### petroleum gases, liquefied

Additional classification	Pétrole (gaz liquéfié); C; La mention "C" signifie que l'agent en question relève du champ d'application de l'arrêté royal du 2 décembre 1993 concernant la protection des travailleurs contre les risques liés à l'exposition à des agents cancérigènes et mutagènes et reprotoxiques au travail.
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## National legislation The Netherlands

### CHAIN LUBE H1

Waterbezwaarlijkheid	B (3); Algemene Beoordelingsmethodiek (ABM)
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## National legislation France

### CHAIN LUBE H1

No data available

## National legislation Germany

### CHAIN LUBE H1

WGK	1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics	
TA-Luft	5.2.5
hydrocarbons, C11-C13, isoalkanes, < 2% aromatics	
TA-Luft	5.2.5

## National legislation United Kingdom

### CHAIN LUBE H1

No data available

## Other relevant data

### CHAIN LUBE H1

No data available

## 15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

## SECTION 16: Other information

### Full text of any H-statements referred to under heading 3:

- H220 Extremely flammable gas.  
H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.  
H280 Contains gas under pressure; may explode if heated.  
H304 May be fatal if swallowed and enters airways.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic

Reason for revision: 9.2

Publication date: 2008-03-03

Date of revision: 2020-09-20

Revision number: 0401

Product number: 45855

12 / 13

# CHAIN LUBE H1

PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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Date of revision: 2020-09-20

Revision number: 0401

Product number: 45855

13 / 13