SAFETY DATA SHEET



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

NOVABOOT LUBE

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

1.1. Product identifier

: NOVABOOT LUBE Product name **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

Lubricant

1.2.2 Uses advised against

No uses advised against

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*

Industrielaan 5B

B-2250 Olen

2 +32 14 25 76 40

4 +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

2 +32 14 85 97 37

4 +32 14 85 97 38

info@tec7.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.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

2.2. Label elements



Signal word Danger

H-statements H222

Extremely flammable aerosol.

H229

Pressurised container: May burst if heated.

P-statements P210

> Do not spray on an open flame or other ignition source. P211

Do not pierce or burn, even after use. P251

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

2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel

http://www.big.be

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Reason for revision: 3.2; 5; 15

Revision number: 0502 Product number: 32980

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics 01-2119457273-39		C≤20%	Asp. Tox. 1; H304	(1)(10)	Constituent
	106-97-8 203-448-7	C≤20%	Flam. Gas 1; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)(21)	Propellant
le, e le constante de la const	74-98-6 200-827-9		Flam. Gas 1; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant

- (1) For H-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
- (21) 1,3-butadiene < 0.1%

SECTION 4: First aid measures

4.1. Description of first aid measures

General

If you feel unwell, seek medical advice.

After inhalation

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Rinse with water. Do not apply (chemical) neutralizing agents without medical advice. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Do not apply (chemical) neutralizing agents without medical advice. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

No effects known.

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: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher.

5.1.2 Unsuitable extinguishing media:

 $Small\ fire: \ Quick-acting\ CO2\ extinguisher,\ Water\ (water\ can\ be\ used\ to\ control\ jet\ flame),\ Foam.$

Major fire: Water (water can be used to control jet flame), Foam.

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:

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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: persistant risk of physical explosion.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

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 explosion proof 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. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

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. Clean contaminated surfaces with an excess of water. 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. Remove contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

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

7.2.2 Keep away from:

Heat sources, ignition sources.

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

Hydrocarbures aliphatiques sous forme gazeuse: (Alcanes C1-C3)	Time-weighted average exposure limit 8 h	1000 ppm
	Short time value	980 ppm
	Short time value	2370 mg/m³

France

n-Butane	Time-weighted average exposure limit 8 h (VL: Valeur non	800 ppm
	réglementaire indicative)	
	Time-weighted average exposure limit 8 h (VL: Valeur non	1900 mg/m³
	réglementaire indicative)	

Germany

Butan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m³
Propan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm

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Propan	Time-weighted average exposure limit 8 h (TRGS 900)	1800 mg/m ³
UK		
Butane	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	600 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1450 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	750 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1810 mg/m³

USA (TLV-ACGIH)

Butane, all isomers	Short time value (TLV - Adopted Value)	1000 ppm
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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.

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).

	Measured breakthrough time	Remark	Protection index
nitrile rubber	> 480 minutes	0.35 mm	Class 6

- materials (good resistance)

Nitrile rubber.

c) Eye protection:

Protective goggles.

d) Skin protection:

Protective clothing.

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

Aerosol
Characteristic odour
No data available in the literature
No data available on colour
Not applicable (liquid)
0.7 - 9.5 vol %
Extremely flammable aerosol.
Not applicable (mixture)
1 mPa.s ; 20 °C ; Liquid
1 mm²/s ; 20 °C ; Liquid
0 °C ; Liquid
-42 °C - 211 °C ; Liquid
0.3 ; Butyl acetate
No data available in the literature
8530 hPa ; 20 °C
Water ; insoluble
0.967 ; 20 °C ; Liquid
No data available in the literature
255 °C; Liquid
Not applicable (aerosol)
No chemical group associated with explosive properties

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Oxidising properties	No chemical group associated with oxidising properties
рН	6.8

9.2. Other information

Absolute density	967 kg/m³ ; 20 °C ; Liquid	
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SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

No data available.

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

No data available.

10.6. Hazardous decomposition products

Upon combustion: CO and CO2 are formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

NOVABOOT LUBE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	Equivalent to OECD	> 5000 mg/kg bw		Rat (male /	Read-across	
		401			female)		
Dermal	LD50	Equivalent to OECD	> 3160 mg/kg bw	24 h	Rabbit (male /	Read-across	
		402			female)		
Inhalation (aerosol)	LC50	1	> 5.6 mg/l	4 h	Rat (male)	Read-across	
1		403			1		

Conclusion

Not classified for acute toxicity

Corrosion/irritation

NOVABOOT LUBE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

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

Conclusion

Not classified as irritating to the eyes

Not classified as irritating to the skin

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

NOVABOOT LUBE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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<u>hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics</u>

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

Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

Specific target organ toxicity

NOVABOOT LUBE

No (test)data on the mixture available

Judgement is based on the relevant ingredients hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral (stomach tube)	NOAEL	Equivalent to OECD 422	≥ 1000 mg/kg bw/day		No effect		Rat (male / female)	Read-across
Dermal								Data waiving
Inhalation (vapours)	NOAEC	Equivalent to OECD 413	≥ 2200 mg/m³ air		No effect	14 weeks (6h / day, 5 days / week)	Rat (female)	Read-across

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

NOVABOOT LUBE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic	OECD 471	Bacteria (S.typhimurium)	No effect	Read-across	
activation, negative					
without metabolic					
activation					

Mutagenicity (in vivo)

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD		Rat (male)		Read-across
	478				

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

NOVABOOT LUBE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	- 0 -	Value determination
Inhalation	NOAEC	Equivalent to	≥ 2200 mg/m³	105 weeks (6h / day,	Rat (female)	No carcinogenic		Read-across
(vapours)		OECD 453	air	5 days / week)		effect		

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

NOVABOOT LUBE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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<u>hydrocarbons</u>, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

	Parameter	Method	Value	Exposure time	Species	Effect	- 0 -	Value determination
Developmental toxicity	NOAEC		≥ 1575 mg/m³	10 days (6h / day)	Rat (female)	No effect		Experimental value
Maternal toxicity	NOAEL	Equivalent to OECD 414	≥ 5220 mg/kg bw/day	10 day(s)	Rat	No effect		Experimental value

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

NOVABOOT LUBE

No (test)data on the mixture available

<u>hydrocarbons</u>, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

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

Chronic effects from short and long-term exposure

NOVABOOT LUBE

No effects known.

SECTION 12: Ecological information

12.1. Toxicity

NOVAROOT LUBE

No (test)data on the mixture available

Judgement of the mixture is based on the relevant ingredients

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 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	Experimental value; GLP
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	NOELR	OECD 201	> 1000 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value; GLP
Toxicity aquatic micro- organisms	EL50		> 1000 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR
<u>outane</u>								

<u>outane</u>								
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		> 1000 mg/l	96 h	Pimephales promelas			QSAR
Acute toxicity crustacea	LC50		4.2 mg/l - 8.4 mg/l	48 h	Daphnia magna			QSAR
	EC0		0.6 mg/l - 0.9 mg/l	504 h	Daphnia magna			QSAR
Toxicity algae and other aquatic plants	EC50		5.3 mg/l - 5.5 mg/l	72 h	Algae			QSAR

<u>ropane</u>								
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		49.9 mg/l	96 h	Pisces		Fresh water	QSAR; Estimated value
Acute toxicity crustacea	EC50		7 mg/l	48 h	Daphnia magna			Literature study
Toxicity algae and other aquatic plants	IC50		8 mg/l	72 h	Algae			Literature study
Long-term toxicity fish	EC0		2.4 mg/l - 3.7 mg/l	768 h	Pimephales promelas			QSAR
Long-term toxicity aquatic crustacea	EC0		1.1 mg/l - 2.0 mg/l	504 h	Daphnia magna			QSAR

Conclusion

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

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12.2. Persistence and degradability

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	80 %; GLP	28 day(s)	Read-across

Biodegradation soil

Method	Value	Duration	Value determination
Equivalent or similar to OECD 304A	59.7 % - 62.6 %; Oxygen	61 day(s)	Read-across
	consumption		

Conclusion

Contains readily biodegradable component(s)

12.3. Bioaccumulative potential

NOVABOOT LUBE

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Percent distribution

Method	Fraction air		Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	65.8 %	0 %	22.9 %	9.6 %	1.7 %	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

NOVABOOT LUBE

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

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

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

14 06 03* (waste organic solvents, refrigerants and foam/aerosol propellants: other solvents and solvent mixtures). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

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. Specific treatment. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10* (packaging containing residues of or contaminated by dangerous substances).

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SECTION 14: Transport information

d (ADR) I.1. UN number	
UN number	1950
1.2. UN proper shipping name	_
Proper shipping name	Aerosols
I.3. Transport hazard class(es)	
Hazard identification number	
Class	2
Classification code	5F
1.4. Packing group	
Packing group	
Labels	2.1
1.5. Environmental hazards	
Environmentally hazardous substance mark	no
1.6. Special precautions for user	Loo
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging fo liquids. A package shall not weigh more than 30 kg. (gross mass)
(RID)	
I.1. UN number	1050
UN number	1950
1.2. UN proper shipping name	Agracala
Proper shipping name	Aerosols
I.3. Transport hazard class(es) Hazard identification number	23
Class	2
Classification code	5F
	jor .
I.4. Packing group Packing group	
Labels	2.1
I.5. Environmental hazards	2.1
Environmentally hazardous substance mark	no
1.6. Special precautions for user	lio
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging fo liquids. A package shall not weigh more than 30 kg. (gross mass)
nd waterways (ADN)	induids. To puesage shall not weight more than 50 kg. (gross mass)
I.1. UN number	
UN number	1950
1.2. UN proper shipping name	·
Proper shipping name	Aerosols
1.3. Transport hazard class(es)	
Class	2
Classification code	5F
1.4. Packing group	
Packing group	
Labels	2.1
1.5. Environmental hazards	
Environmentally hazardous substance mark	no
1.6. Special precautions for user	
Special provisions	190
Special provisions	327
Special provisions	344
	625
Special provisions	
Special provisions Limited quantities	liquids. A package shall not weigh more than 30 kg. (gross mass)
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) 1950

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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	-
Environmentally hazardous substance mark	no
14. <u>6. Special precautions for user</u>	
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 Co	ode .
14.7. Transport in bulk according to Annex II of Marpol and the IBC Co Annex II of MARPOL 73/78	Not applicable
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number	Not applicable
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number	
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number 14.2. UN proper shipping name	Not applicable 1950
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number 14.2. UN proper shipping name Proper shipping name	Not applicable
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number 14.2. UN proper shipping name Proper shipping name 14.3. Transport hazard class(es)	Not applicable 1950 Aerosols, flammable
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number 14.2. UN proper shipping name Proper shipping name 14.3. Transport hazard class(es) Class	Not applicable 1950
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number 14.2. UN proper shipping name Proper shipping name 14.3. Transport hazard class(es) Class 14.4. Packing group	Not applicable 1950 Aerosols, flammable
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number 14.2. UN proper shipping name Proper shipping name 14.3. Transport hazard class(es) Class	Not applicable 1950 Aerosols, flammable
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number 14.2. UN proper shipping name Proper shipping name 14.3. Transport hazard class(es) Class 14.4. Packing group Packing group Labels	Not applicable 1950 Aerosols, flammable 2.1
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number 14.2. UN proper shipping name Proper shipping name 14.3. Transport hazard class(es) Class 14.4. Packing group Packing group Labels 14.5. Environmental hazards	Not applicable 1950 Aerosols, flammable 2.1
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number 14.2. UN proper shipping name Proper shipping name 14.3. Transport hazard class(es) Class 14.4. Packing group Packing group Labels	Not applicable 1950 Aerosols, flammable 2.1
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number UN number 14.2. UN proper shipping name Proper shipping name 14.3. Transport hazard class(es) Class 14.4. Packing group Packing group Labels 14.5. Environmental hazards Environmentally hazardous substance mark	Not applicable 1950 Aerosols, flammable 2.1
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number	Not applicable 1950 Aerosols, flammable 2.1 2.1
Annex II of MARPOL 73/78 (ICAO-TI/IATA-DGR) 14.1. UN number	Not applicable 1950 Aerosols, flammable 2.1 2.1 no A145

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
32.150 %	
283.521 g/l	

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, C10-C13, n-alkanes, isoalkanes, cyclics, < 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

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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.

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National legislation Belgium

NOVABOOT LUBE

No data available

National legislation The Netherlands NOVABOOT LUBE

Z (2); Algemene Beoordelingsmethodiek (ABM) Waterbezwaarlijkheid

National legislation France NOVABOOT LUBE

No data available

National legislation Germany

WGK	1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017	
hydrocarbons, C10-C13, n-alkanes,	, isoalkanes, cyclics, < 2% aromatics	
TA-Luft	5.2.5	

National legislation United Kingdom

NOVABOOT LUBE

No data available

Other relevant data

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)

DMFI Derived Minimal Effect Level Derived No Effect Level DNEL 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

PRT Persistent, Bioaccumulative & Toxic PNEC Predicted No Effect Concentration STP Sludge Treatment Process

vPvB very Persistent & very Bioaccumulative

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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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