

SAFETY DATA SHEET

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



NOVAROOF

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

1.1. Product identifier

Product name : NOVAROOF
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

Sealing compound

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@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
Flam. Liq.	category 3	H226: Flammable liquid and vapour.
STOT RE	category 2	H373: May cause damage to organs (central nervous system) through prolonged or repeated exposure if inhaled.
STOT SE	category 3	H336: May cause drowsiness or dizziness.
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.

2.2. Label elements



Contains: hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics; hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%); hydrocarbons, C9, aromatics.

Signal word : Warning

H-statements

H226 : Flammable liquid and vapour.
H373 : May cause damage to organs (central nervous system) through prolonged or repeated exposure if inhaled.
H336 : May cause drowsiness or dizziness.
H412 : Harmful to aquatic life with long lasting effects.

P-statements

P210 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 : Wear protective gloves and eye protection/face protection.
P260 : Do not breathe vapours/mist.

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel

<http://www.big.be>

© BIG vzw

Reason for revision: 3; 5; 15

Revision number: 1002

Publication date: 2003-04-16

Date of revision: 2019-06-06

Product number: 40675

1 / 17

134-16239-650-en

NOVAROOF

P304 + P340

P303 + P361 + P353

P403 + P233

Supplemental information

EUH066

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Store in a well-ventilated place. Keep container tightly closed.

Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No List No	Conc. (C)	Classification according to CLP	Note	Remark
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics 01-2119463258-33	919-857-5	10%<C<25%	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H336	(1)(10)	Constituent
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) 01-2119458049-33	919-446-0	5%<C<10%	Flam. Liq. 3; H226 STOT RE 1; H372 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(10)	Constituent
hydrocarbons, C9, aromatics 01-2119455851-35	918-668-5	5%<C<10%	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H335 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(10)	Constituent
quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides 01-2119486994-16	68391-05-9 269-924-1	C<1%	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	(1)	Constituent

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

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

Note: numbers 9xx-xxx-x are provisional list numbers assigned by Echa pending an official EC inventory number

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

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

After skin contact:

Wash immediately with lots of 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 induce vomiting. 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:

EXPOSURE TO HIGH CONCENTRATIONS: Narcosis.

After skin contact:

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Cracking of the skin.

After eye contact:

No effects known.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

Reason for revision: 3; 5; 15

Publication date: 2003-04-16

Date of revision: 2019-06-06

Revision number: 1002

Product number: 40675

2 / 17

NOVAROOF

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, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher.

Major fire: Class B foam (not alcohol-resistant).

5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.

Major fire: Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

On burning: release of harmful gases/vapours e.g.: carbon monoxide - carbon dioxide.

5.3. Advice for firefighters

5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Face shield. 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 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. Face shield. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Contain released product. Dam up the liquid spill. Prevent soil and water pollution. Prevent spreading in sewers.

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. Contaminated surfaces: do not clean (treat) with 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

Keep away from naked flames/heat. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Observe strict hygiene. Remove contaminated clothing immediately. Do not discharge the waste into the drain. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Store in a cool area. Fireproof storeroom. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources, ignition sources.

7.2.3 Suitable packaging material:

No data available

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.

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

DNEL/DMEL - Workers

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1500 mg/m ³	
	Long-term systemic effects dermal	300 mg/kg bw/day	

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	330 mg/m ³	
	Acute systemic effects inhalation	570 mg/m ³	
	Long-term systemic effects dermal	21 mg/kg bw/day	

hydrocarbons, C9, aromatics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	150 mg/m ³	
	Long-term systemic effects dermal	25 mg/kg bw/day	

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	27 mg/m ³	
	Long-term systemic effects dermal	12.75 mg/kg bw/day	

DNEL/DMEL - General population

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	900 mg/m ³	
	Long-term systemic effects dermal	300 mg/kg bw/day	
	Long-term systemic effects oral	300 mg/kg bw/day	

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	71 mg/m ³	
	Acute systemic effects inhalation	570 mg/m ³	
	Long-term systemic effects dermal	12 mg/kg bw/day	
	Long-term systemic effects oral	21 mg/kg bw/day	

hydrocarbons, C9, aromatics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	32 mg/m ³	
	Long-term systemic effects dermal	11 mg/kg bw/day	
	Long-term systemic effects oral	11 mg/kg bw/day	

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	8 mg/m ³	
	Long-term systemic effects dermal	7.65 mg/kg bw/day	
	Long-term systemic effects oral	2.3 mg/kg bw/day	

PNEC

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

Compartment	Value	Remark
Fresh water	13 µg/l	
Salt water	1.3 µg/l	
Fresh water (intermittent releases)	2.6 µg/l	
STP	1.2 mg/l	
Fresh water sediment	8.8 mg/kg sediment dw	
Marine water sediment	0.88 mg/kg sediment dw	
Soil	7 mg/kg soil dw	

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.

NOVAROOF

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe strict hygiene. 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).

Materials	Measured breakthrough time	Thickness	Protection index
nitrile rubber	> 240 minutes	0.12 mm	Class 5

c) Eye protection:

Safety glasses.

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

Physical form	Liquid
Odour	Characteristic odour
Odour threshold	No data available
Colour	Black
Particle size	No data available
Explosion limits	0.6 - 7.0 vol %
Flammability	Flammable liquid and vapour.
Log Kow	Not applicable (mixture)
Dynamic viscosity	108000 mPa.s ; 20 °C
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	135 °C
Evaporation rate	No data available
Relative vapour density	No data available
Vapour pressure	3 hPa ; 20 °C 15 hPa ; 50 °C
Solubility	Water ; insoluble
Relative density	1.1 ; 20 °C
Decomposition temperature	No data available
Auto-ignition temperature	> 200 °C
Flash point	41 °C
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available

9.2. Other information

Absolute density	1120 kg/m ³ ; 20 °C
------------------	--------------------------------

SECTION 10: Stability and reactivity

10.1. Reactivity

May be ignited by sparks.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: use spark-/explosionproof appliances and lighting system.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

On burning: release of harmful gases/vapours e.g.: carbon monoxide - carbon dioxide.

NOVAROOF

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

NOVAROOF

No (test) data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 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)	Read-across	
Dermal	LD50	Equivalent to OECD 402	> 3160 mg/kg bw	24 h	Rabbit (male / female)	Read-across	
Inhalation (aerosol)	LC50	Equivalent to OECD 403	> 5.6 mg/l air	4 h	Rat (male / female)	Read-across	

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	> 15000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Other	> 3400 mg/kg bw	24 h	Rat (male / female)	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 13.1 mg/l air	4 h	Rat (male / female)	Experimental value	

hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		> 6984 mg/kg bw		Rat (male)	Experimental value	
Oral	LD50		3492 mg/kg bw		Rat (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	> 6.193 mg/l air	4 h	Rat (male / female)	Experimental value	

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	960 mg/kg bw		Rat (male / female)	Experimental value	
Dermal						Data waiving	
Inhalation (aerosol)	LC50	OECD 403	0.25 mg/l	4 h	Rat (male / female)	Experimental value	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

NOVAROOF

No (test) data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

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

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	
Skin	Not irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	
Skin	Not irritating	Human observation	4 h - 6 h	24; 48 hours	Human	Experimental value	

Reason for revision: 3; 5; 15

Publication date: 2003-04-16

Date of revision: 2019-06-06

Revision number: 1002

Product number: 40675

6 / 17

NOVAROOF

hydrocarbons, C9, aromatics

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405		1; 24; 48; 72 hours	Rabbit	Experimental value	
Skin	Slightly irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	
Inhalation	Irritating; STOT SE cat.3					Expert judgement	

quatarnary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	Equivalent to OECD 405	30 seconds	24; 48; 72 hrs; 4 days	Rabbit	Experimental value	
Skin	Corrosive	Draize Test	24 h		Rabbit	Experimental value	

Conclusion

Not classified as irritating to the skin
 Not classified as irritating to the eyes
 Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

NOVAROOF

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C9-C11, n-alkanes, 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	

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406		24; 48 hours	Guinea pig (male / female)	Experimental value	
Skin	Not sensitizing	Human observation	3 weeks (5 days / week)	24; 48 hours	Human (male / female)	Experimental value	

hydrocarbons, C9, aromatics

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406		24; 48 hours	Guinea pig (female)	Experimental value	

quatarnary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

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

Conclusion

Not classified as sensitizing for skin
 Not classified as sensitizing for inhalation

Specific target organ toxicity

NOVAROOF

No (test)data on the mixture available

Classification is based on the relevant ingredients

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	Equivalent to OECD 422	≥ 1000 mg/kg bw/day		No effect	≥ 15 day(s)	Rat (male / female)	Read-across
Dermal								Data waiving
Inhalation (vapours)	NOAEL	Equivalent to OECD 413	> 1160 mg/m³ air		No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across
Inhalation			STOT SE cat.3		Drowsiness, dizziness			Expert judgement

Reason for revision: 3; 5; 15

Publication date: 2003-04-16

Date of revision: 2019-06-06

Revision number: 1002

Product number: 40675

7 / 17

NOVAROOF

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	Equivalent to OECD 408	1056 mg/kg bw/day		No effect	30 day(s)	Rat (female)	Experimental value
Dermal	NOAEL systemic effects	Equivalent to OECD 411	> 495 mg/kg bw/day		No adverse systemic effects	13 weeks (5 days / week)	Rat (female)	Read-across
Inhalation (vapours)	NOAEC	Equivalent to OECD 413	690 ppm		No effect	13 weeks (6h / day, 5 days / week)	Rat (female)	Experimental value
Inhalation			STOT RE cat.1		Impairment/degeneration			Literature study
Inhalation	NOAEC		570 mg/m ³ air	Central nervous system	No effect	2 days (4h / day)	Human (male)	Read-across

hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	Equivalent to OECD 408	600 mg/kg bw/day		No effect	13 weeks (daily)	Rat (male / female)	Read-across
Dermal								Data waiving
Inhalation (vapours)	NOAEC	Equivalent to OECD 452	1800 mg/m ³ air		No effect	52 weeks (6h / day, 5 days / week)	Rat (male)	Read-across

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (diet)	NOAEL	OECD 408	1500 ppm		No effect	93 day(s)	Rat (male / female)	Read-across
Oral (diet)	LOAEL	OECD 408	3000 ppm		Histopathology	93 day(s)	Rat (male / female)	Read-across

Conclusion

May cause drowsiness or dizziness.

May cause damage to organs (central nervous system) through prolonged or repeated exposure if inhaled.

Not classified as sub-chronically toxic in contact with skin

Not classified as sub-chronically toxic if swallowed

Mutagenicity (in vitro)

NOVAROOF

No (test)data on the mixture available

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Human lymphocytes	No effect	Read-across	

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Human lymphocytes	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

hydrocarbons, C9, aromatics

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

Reason for revision: 3; 5; 15

Publication date: 2003-04-16

Date of revision: 2019-06-06

Revision number: 1002

Product number: 40675

8 / 17

NOVAROOF

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 473	Human lymphocytes		Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)		Experimental value	

Mutagenicity (in vivo)

NOVAROOF

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

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

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

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

hydrocarbons, C9, aromatics

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 475	5 day(s)	Rat (male)	Bone marrow	Experimental value

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

NOVAROOF

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C9-C11, n-alkanes, 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 ³ air	105 weeks (6h / day, 5 days / week)	Rat (female)	No carcinogenic effect		Read-across
Dermal	Dose level	Equivalent to OECD 451	50 µl	104 week(s)	Mouse (male)	No carcinogenic effect		Read-across

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

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

hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Unknown								Data waiving

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

NOVAROOF

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Inhalation (vapours))	NOAEL	Equivalent to OECD 414	≥ 5220 mg/m ³ air	10 days (6h / day)	Rat	No effect		Experimental value
Maternal toxicity (Inhalation (vapours))	NOAEL	Equivalent to OECD 414	> 5220 ppm	10 days (6h / day)	Rat (female)	No effect		Experimental value
Effects on fertility (Inhalation (vapours))	NOAEL	Equivalent to OECD 413	≥ 2200 mg/m ³ air	14 weeks (6h / day, 5 days / week)	Rat (male / female)	No effect		Read-across

Reason for revision: 3; 5; 15

Publication date: 2003-04-16

Date of revision: 2019-06-06

Revision number: 1002

Product number: 40675

9 / 17

NOVAROOF

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	≥ 5220 mg/m ³ air	10 days (6h / day)	Rat	No effect	Foetus	Experimental value
Maternal toxicity	NOAEL	Equivalent to OECD 414	≥ 5220 mg/m ³ air		Rat	No effect		Experimental value
Effects on fertility	NOAEL	Equivalent to OECD 416	≥ 300 mg/kg bw/day	16 weeks (daily)	Rat (male / female)	No effect		Experimental value

hydrocarbons, C9, aromatics

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC		100 ppm	10 day(s)	Mouse	No effect	Foetus	Experimental value
	LOAEC		500 ppm	10 day(s)	Mouse	Reduced foetal bodyweights	Foetus	Experimental value
Maternal toxicity	NOAEC		100 ppm	10 day(s)	Mouse	No effect		Experimental value
	LOAEC		500 ppm	10 day(s)	Mouse	Body weight reduction	General	Experimental value
Effects on fertility	NOAEC	3 generation study	7500 mg/m ³		Rat (male / female)	No effect		Experimental value

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	≥ 132 mg/kg bw/day	10 days (gestation, daily)	Rat	No effect		Experimental value
Maternal toxicity	NOAEL	Equivalent to OECD 414	≥ 132 mg/kg bw/day	10 days (gestation, daily)	Rat	No effect		Experimental value
Effects on fertility	NOAEL	Equivalent to OECD 416	750 ppm		Rat (male / female)	No effect		Experimental value

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

NOVAROOF

No (test)data on the mixture available

Classification is based on the relevant ingredients

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

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

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

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

hydrocarbons, C9, aromatics

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

Conclusion

Repeated exposure may cause skin dryness or cracking.

Chronic effects from short and long-term exposure

NOVAROOF

Impairment of the nervous system.

SECTION 12: Ecological information

12.1. Toxicity

NOVAROOF

No (test)data on the mixture available

Classification is based on the relevant ingredients

NOVAROOF

hydrocarbons, C9-C11, 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	EL50	OECD 201	> 1000 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	10 mg/l WAF - 30 mg/l WAF	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EL50	OECD 202	10 mg/l - 22 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EL50	OECD 201	4.1 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOELR		0.13 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR; Growth
Long-term toxicity aquatic crustacea	EC50	OECD 211	0.328 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Read-across; Reproduction
Toxicity aquatic micro-organisms	EL50	Other	43.98 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR

hydrocarbons, C9, aromatics

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	9.2 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EL50	OECD 202	3.2 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EL50	OECD 201	2.9 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
	NOELR	OECD 201	1 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	QSAR; GLP
Long-term toxicity fish	NOELR		1.228 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR
Long-term toxicity aquatic crustacea	NOELR		2.144 mg/l	21 day(s)	Daphnia magna		Fresh water	QSAR

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	0.26 mg/l	96 h	Danio rerio	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	LC50	ISO 14669	0.295 mg/l	48 h	Acartia tonsa	Static system	Salt water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	0.386 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
	NOEC	OECD 201	0.06 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
Long-term toxicity fish	NOEC	US EPA	0.053 mg/l	35 day(s)	Pimephales promelas		Fresh water	Read-across
Long-term toxicity aquatic crustacea	NOEC	OECD 211	0.5 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction

Conclusion

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	80 %; Oxygen consumption	28 day(s)	Experimental value

NOVAROOF

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	74.7 %; GLP	28 day(s)	Read-across

hydrocarbons, C9, aromatics

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	78 %	28 day(s)	Experimental value

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	61 %; GLP	28 day(s)	Experimental value

Conclusion

Does not contain any not readily biodegradable component(s)

12.3. Bioaccumulative potential

NOVAROOF

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.01	104.9 l/kg; Fresh weight			Calculated value

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Log Kow

Method	Remark	Value	Temperature	Value determination
		3.7 - 6.7		

hydrocarbons, C9, aromatics

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.00	70.79 l/kg			Calculated value

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	2.901	Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Fugacity Model Level III	29 %		1.37 %	1.57 %	68.1 %	Calculated value

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	96 %		1.3 %	0.077 %	1.4 %	Calculated value

Conclusion

Contains component(s) with potential for mobility in 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.

Reason for revision: 3; 5; 15

Publication date: 2003-04-16

Date of revision: 2019-06-06

Revision number: 1002

Product number: 40675

12 / 17

NOVAROOF

12.6. Other adverse effects

NOVAROOF

Fluorinated greenhouse gases (Regulation (EU) No 517/2014)

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)

Groundwater

Groundwater pollutant

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Groundwater

Groundwater pollutant

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Groundwater

Groundwater pollutant

hydrocarbons, C9, aromatics

Groundwater

Groundwater pollutant

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).

08 04 09* (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants containing organic solvents or other hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Should not be landfilled with household waste. 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

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

Transport	Not subject
-----------	-------------

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Hazard identification number	
Class	
Classification code	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

14.6. Special precautions for user

Special provisions	
Limited quantities	
Specific mention	Viscous liquid with flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$, which meets the conditions indicated in 2.2.3.1.5 of ADR, is not subject to ADR

Rail (RID)

14.1. UN number

Transport	Not subject
-----------	-------------

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Hazard identification number	
Class	
Classification code	

NOVAROOF

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

14.6. Special precautions for user

Special provisions	
Limited quantities	
Specific mention	Viscous liquid with flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$, which meets the conditions indicated in 2.2.3.1.5 of RID, is not subject to RID

Inland waterways (ADN)

14.1. UN number

Transport	Not subject
-----------	-------------

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Class	
Classification code	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

14.6. Special precautions for user

Special provisions	
Limited quantities	
Specific mention	Viscous liquid with flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$, which meets the conditions indicated in 2.2.3.1.5 of ADN, is not subject to ADN

Sea (IMDG/IMSBC)

14.1. UN number

UN number	1139
-----------	------

14.2. UN proper shipping name

Proper shipping name	coating solution
----------------------	------------------

14.3. Transport hazard class(es)

Class	3
-------	---

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Marine pollutant	-
Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	955
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Specific mention	Viscous liquid with flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$, which meets the conditions indicated in 2.3.2.5 of IMDG, is not subject to IMDG Code chapters 4.1, 5.2 and 6.1

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

Annex II of MARPOL 73/78	Not applicable, based on available data
--------------------------	---

Air (ICAO-TI/IATA-DGR)

14.1. UN number

UN number	1139
-----------	------

14.2. UN proper shipping name

Proper shipping name	Coating solution
----------------------	------------------

14.3. Transport hazard class(es)

Class	3
-------	---

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

14.6. Special precautions for user

Special provisions	A3
--------------------	----

Passenger and cargo transport

Limited quantities: maximum net quantity per packaging	10 L
--	------

NOVAROOF

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
24.30 %	
274.6 g/l	

VOC content Directive 2004/42/EC

Maximum value	EC limit value	Category	Subcategory	Notation
274.6 g/l	840 g/l	IIB	e: Special finishes	2004/42/IIB(e)(840)274.6

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
<ul style="list-style-type: none"> · hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics · hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) · hydrocarbons, C9, aromatics 	<p>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:</p> <p>(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;</p> <p>(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;</p> <p>(c) hazard class 4.1;</p> <p>(d) hazard class 5.1.</p>	<p>1. Shall not be used in:</p> <ul style="list-style-type: none"> — 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, <p>2. Articles not complying with paragraph 1 shall not be placed on the market.</p> <p>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:</p> <ul style="list-style-type: none"> — 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, <p>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).</p> <p>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 are met:</p> <p>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";</p> <p>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";</p> <p>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.</p> <p>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.</p> <p>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.'</p>
<ul style="list-style-type: none"> · hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics · hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) · hydrocarbons, C9, aromatics 	<p>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 that Regulation or not.</p>	<p>1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:</p> <ul style="list-style-type: none"> — metallic glitter intended mainly for decoration, — artificial snow and frost, — "whoopie" cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs. <p>2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:</p> <p>"For professional users only".</p> <p>3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC.</p> <p>4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.</p>

National legislation Belgium

NOVAROOF

No data available

Reason for revision: 3; 5; 15

Publication date: 2003-04-16

Date of revision: 2019-06-06

Revision number: 1002

Product number: 40675

15 / 17

NOVAROOF

National legislation The Netherlands

NOVAROOF

Waterbezwaarlijkheid	Z (2); Algemene Beoordelingsmethodiek (ABM)
----------------------	---

National legislation France

NOVAROOF

No data available

National legislation Germany

NOVAROOF

WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	
TA-Luft	5.2.5
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	
TA-Luft	5.2.5/I

National legislation United Kingdom

NOVAROOF

No data available

Other relevant data

NOVAROOF

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:

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H372 Causes damage to organs (central nervous system) through prolonged or repeated exposure if inhaled.
- H373 May cause damage to organs (central nervous system) through prolonged or repeated exposure if inhaled.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

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

M-factor

quaternary ammonium compounds, di-C12-18-alkyldimethyl, chlorides	1	Acute	ECHA
---	---	-------	------

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

Reason for revision: 3; 5; 15

Publication date: 2003-04-16

Date of revision: 2019-06-06

Revision number: 1002

Product number: 40675

16 / 17

NOVAROOF

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.