SAFETY DATA SHEET

novatio

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

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 **2** +32 14 25 76 40 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 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					
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 nervou	s system) through prolonged or repeated exposure if inhale	ed.				
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, o	pen flames and other ignition sources. No smoking.					
P280	Wear protective gloves and eye protection/fac	ce protection.					
P260	Do not breathe vapours/mist.						
Created by: Brandweerinformat	iecentrum voor gevaarlijke stoffen vzw (BIG)	Publication date: 2033-04-16	u e				
Technische Schoolstraat 43 A, B	-2440 Geel	Date of revision: 2023-05-02	750				

http://www.big.be

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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.

tion 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	M-factors and ATE
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 01-2119463258-33	919-857-5	10% <c<25%< td=""><td>Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H336 EUH066</td><td>(1)(2)(10)</td><td>Constituent</td><td></td></c<25%<>	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H336 EUH066	(1)(2)(10)	Constituent	
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) 01-2119458049-33	919-446-0	5% <c<10%< td=""><td>Flam. Liq. 3; H226 STOT RE 1; H372 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH066</td><td>(1)(10)</td><td>Constituent</td><td></td></c<10%<>	Flam. Liq. 3; H226 STOT RE 1; H372 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH066	(1)(10)	Constituent	
hydrocarbons, C9, aromatics 01-2119455851-35	128601-23-0 918-668-5	5% <c<10%< td=""><td>Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H335 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH066</td><td>(1)(2)(10)</td><td>Constituent</td><td></td></c<10%<>	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H335 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH066	(1)(2)(10)	Constituent	
quaternary ammonium compounds, dicoco alkyldimethyl, chlorides	61789-77-3 263-087-6	C<1%	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	(1)	Constituent	M: 1 (Acute, ECHA)

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

(2) Substance with a Community workplace exposure limit

(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:

Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

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. If irritation persists, consult a doctor/medical service.

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: Narcosis. After skin contact: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Cracking of the skin. After eye contact: No effects known.

Reason for revision: 3, 8, 15

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, 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

Upon combustion: formation of CO, CO2 and small quantities of nitrous vapours, hydrogen chloride.

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 (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

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 section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034). Suitable protective clothing See section 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 section 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.

Reason for revision: 3, 8, 15

SECTION 8: Exposure contr	ols/persona	protection
Section of Exposure contr	ois/persona	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.

Hydrocarbures en C6-C12 (ens	emble des,vapeurs)	Time-weighted averages réglementaire indicat	ge exposure limit 8 h (VL: Va tive)	aleur non	1000 mg/m ³
		Short time value (VL: '	Valeur non réglementaire ir	ndicative)	1500 mg/m ³
Germany					
Kohlenwasserstoffgemische, V	erwendung als Lösemittel	Time-weighted average	exposure limit 8 h (TRGS 900)		
Lösemitt elkohlen wasserstoffe Aliphaten	0				
		Time-weighted average	exposure limit 8 h (TRGS 900)		
) National biological limit values	<u>.</u>				
f limit values are applicable and a	vailable these will be listed be	elow.			
2 Sampling methods					
f applicable and available it will b					
3 Applicable limit values when us					
f limit values are applicable a	nd available these will be	listed below.			
4 Threshold values					
<u> DNEL/DMEL - Workers</u> nydrocarbons, C9-C11, n-alkanes,	isoalkanos cuclics < 2% arom	atics			
			Value	Remark	
Effect level (DNEL/DMEL)	Туре		Value	кетагк	
DNEL	Long-term systemic effects inhalation		871 mg/m ³		
	Long-term systemic eff		77 mg/kg bw/day		
nydrocarbons, C9-C12, n-alkanes,		<u>(2-25%)</u>		-	
Effect level (DNEL/DMEL)	Туре		Value	Remark	
DNEL	Long-term systemic eff		330 mg/m ³		
	Acute systemic effects inhalation		570 mg/m ³		
	Long-term systemic eff	fects dermal	21 mg/kg bw/day		
ydrocarbons, C9, aromatics					
Effect level (DNEL/DMEL)	Туре		Value	Remark	
DNEL	Long-term systemic eff	fects inhalation	151 mg/m³		
	Long-term systemic eff	fects dermal	12.5 mg/kg bw/day		
DNEL/DMEL - General population		natics			
Effect level (DNEL/DMEL)	Туре		Value	Remark	
DNEL	Long-term systemic eff	fects inhalation	185 mg/m³		
	Long-term systemic eff		46 mg/kg bw/day		
	Long-term systemic ef		46 mg/kg bw/day		
ydrocarbons, C9-C12, n-alkanes,	isoalkanes, cyclics, aromatics	<u>(2-25%)</u>			
Effect level (DNEL/DMEL)	Туре		Value	Remark	
DNEL	Long-term systemic eff	fects inhalation	71 mg/m³		
	Acute systemic effects	inhalation	570 mg/m³		
		fects dermal	12 mg/kg bw/day		
	Long-term systemic eff		•		
	Long-term systemic eff Long-term systemic eff		21 mg/kg bw/day		
ydrocarbons, C9, aromatics			21 mg/kg bw/day		
ydrocarbons, C9, aromatics Effect level (DNEL/DMEL)			21 mg/kg bw/day	Remark	
	Long-term systemic ef	fects oral		Remark	
Effect level (DNEL/DMEL)	Long-term systemic eft	fects oral	Value	Remark	

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

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.

Reason for revision: 3, 8, 15

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).

	terials Measured breakthrough time		Protection index	Remark
nitrile rubber	> 240 minutes	0.12 mm	Class 5	

<u>c) Eye protection:</u> Safety glasses (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Liquid			
Viscosity	Viscous			
Odour	Characteristic odour			
Odour threshold	No data available in the literature			
Colour	Black			
Particle size	Not applicable (liquid)			
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 in the literature			
Melting point	No data available			
Boiling point	154 °C - 193 °C			
Relative vapour density	No data available in the literature			
Vapour pressure	3 hPa ; 20 °C			
	15 hPa ; 50 °C			
Solubility	Water ; insoluble			
Relative density	1.12 ; 20 °C			
Absolute density	1120 kg/m³ ; 20 °C			
Decomposition temperature	No data available in the literature			
Auto-ignition temperature	> 400 °C			
Flash point	41 °C			
рН	Not applicable (non-soluble in water)			

9.2. Other information

No data available

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

Upon combustion: formation of CO, CO2 and small quantities of nitrous vapours, hydrogen chloride.

Reason for revision: 3, 8, 15

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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	Remark
						determination	
Oral	LD50	OECD 401	> 5000 mg/kg bw		Rat (male /	Read-across	
					female)		
Dermal	LD50	Equivalent to OECD	> 3160 mg/kg bw	24 h	Rabbit (male /	Read-across	
		402			female)		
Inhalation (aerosol)	LC50	Equivalent to OECD	> 5.6 mg/l air	4 h	Rat (male /	Read-across	
		403	-		female)		

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

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

hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
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	> 6.19 mg/l air	4 h	Rat (male / female)	Experimental value	(maximum achievable concentration)
uaternary ammonium c	ompounds, d	licoco alkyldimethyl, c	hlorides	-			
Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral			category 4			Literature study	

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	Remark		
							determination			
	Eye	Not irritating	Equivalent to		24; 48; 72 hours	Rabbit	Read-across	Single treatment		
			OECD 405					without rinsing		
	Skin	Not irritating	Equivalent to	4 h	24; 48; 72 hours	Rabbit	Read-across			
			OECD 404							
hy	hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)									
- r										

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye	Slightly irritating	OECD 405		24; 48; 72 hours	Rabbit	Read-across	Single treatment
Skin	Slightly irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Read-across	

Reason for revision: 3, 8, 15

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 (vapours)	Irritating; STOT SE cat.3					Literature study	
aternary ammoniun	n compounds, dicoc	o alkyldimethyl, ch	orides			•	•
Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage; category 1					Literature study	
Skin	Corrosive; category 1B					Literature study	

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		Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406			Guinea pig (male / female)	Read-across	
vdrocarbons, C9-C12	, n-alkanes, isoalk	anes, cyclics, aromatic	<u>s (2-25%)</u>				
Route of exposure	Result	Method		Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406			Guinea pig (male / female)	Experimental value	
/drocarbons, C9, arc	matics				•		
Route of exposure	Result	Method	Exposure time	Observation time	Species	Value determination	Remark

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

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		Value determination
Oral (stomach tube)	NOAEL	Equivalent to OECD 408	≥ 5000 mg/kg bw/day		No effect	13 weeks (daily)	Rat (male / female)	Read-across
Dermal								Data waiving
Inhalation (vapours)	NOAEL	Equivalent to OECD 413	> 1160 mg/m ³ air			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, 8, 15

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)	Read-across
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	3950 mg/m ³		No effect	13 weeks (6h / day, 5 days / week)	Rat (female)	Experimental value
Inhalation (vapours)	LOAEC	Equivalent to OECD 413	7400 mg/m ³		Weight reduction	13 weeks (6h / day, 5 days / week)	Rat (female)	Experimental value
Inhalation (vapours)	NOAEC		570 mg/m³ air	Central nervous system	No effect	2 days (4h / day)	Human (male)	Experimental value

hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value
noute of exposure	i urumeter	methou	vulue .	organ	Lincot		opecies	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/m³ air		No effect	52 weeks (6h / day, 5 days / week)	Rat (male)	Read-across
Inhalation (vapours)	NOAEC	Equivalent to OECD 452	900 mg/m³ air		No effect	52 weeks (6h / day, 5 days / week)	Rat (female)	Read-across
Inhalation (vapours)			STOT SE cat.3		Drowsiness, dizziness			Literature study

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

Judgement is based on the relevant ingredients

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	OECD 471	Bacteria (S.typhimurium)	No effect	Read-across	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Human lymphocytes	No effect	Read-across	
hydrocarbons, C9-C12, n-alkar	nes, isoalkanes, cyclics, aroma	<u>tics (2-25%)</u>			
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	Read-across	
Negative with metabolic activation, negative without metabolic	Equivalent to OECD 473	Human lymphocytes	No effect	Read-across	

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	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		Mouse (male / female)	Bone marrow	Read-across					
		474									
hyd	hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)										
	Result	Method	Exposure time	Test substrate	Organ	Value determination					
	Negative (Intraperitoneal)	Equivalent to OECD		Rat		Experimental value					
		475									

hydrocarbons, C9, aromatics

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative (Inhalation (vapours))	Equivalent to OECD	5 days (6h / day)	Rat (male)	Bone marrow	Experimental value
	475				

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/m³ air	105 weeks (6h / day, 5 days / week)	Rat (female)	No carcinogenic effect		Read-across
hydrocarbons, C9	-C12, n-alkane	s, isoalkanes, cyclic	s, aromatics (2	-25%)				
Route of	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
exposure								
Inhalation	NOAEC	Equivalent to	1293 ppm	13 weeks (6h / day,	Rat (male /	No carcinogenic		Experimental value
(vapours)		OECD 413		5 days / week)	female)	effect		
hydrocarbons, C9	, aromatics							
Route of	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
exposure								
Unknown								Data waiving

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

<u>NOVAROOF</u>

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	1.0.	Value determination
Developmental toxicity (Inhalation (vapours))	NOAEL	Equivalent to OECD 414	≥ 5220 mg/m³ 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	No effect		Experimental value
Effects on fertility (Inhalation (vapours))	NOAEL	Equivalent to OECD 413	≥ 2200 mg/m³ air	14 weeks (6h / day, 5 days / week)	Rat (male / female)	No effect		Read-across

Reason for revision: 3, 8, 15

Publication date: 2033-04-16

Date of revision: 2023-05-02

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value
	Parameter	Wethod	value	Exposure time	species	Ellect	Organ	determination
Developmental toxicity (Inhalation (vapours))	NOAEC	Developmenta I toxicity study	≥ 300 ppm	10 days (gestation, daily)	Rat	No effect		Experimental value
Maternal toxicity (Inhalation (vapours))	NOAEC	Developmenta I toxicity study	≥ 300 ppm	10 days (gestation, daily)	Rat	No effect		Experimental value
Effects on fertility (Inhalation (vapours))	NOAEC	Equivalent to OECD 421	≥ 1720 mg/m³ air	8 weeks (6h / day, 5 days / week)	Rat (male / female)	No effect		Experimental value
rocarbons, C9, aromatics							-	
	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Inhalation (vapours))	NOAEC	Developmenta I toxicity study	100 ppm	10 days (6h / day)	Mouse	No effect		Experimental value
	LOAEC	Developmenta I toxicity study	500 ppm	10 days (6h / day)	Mouse	Reduced fetal bodyweights	Foetus	Experimental value
Maternal toxicity (Inhalation (vapours))	NOAEC	Developmenta I toxicity study	100 ppm	10 day(s)	Mouse	No effect		Experimental value
	LOAEC	Developmenta I toxicity study	500 ppm	10 day(s)	Mouse	Body weight reduction	General	Experimental value

female)

(Inhalation (vapours))

Conclusion

Not classified for reprotoxic or developmental toxicity

study

Aspiration hazard

Judgement is based on the relevant ingredients Not classified for aspiration toxicity

Toxicity other effects

<u>NOVAROOF</u>

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

	Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
	Skin				Skin	Skin dryness or			Literature study
						cracking			
hyd	rocarbons, C9-C12	, n-alkanes, isoa	lkanes, cyclics, a	romatics (2-25%)					
ſ	Route of	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value
	exposure								determination
Γ					Skin	Skin dryness or			Literature study
						cracking			

hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	 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.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

NOVAROOF

No (test)data on the mixture available Classification is based on the relevant ingredients

Reason for revision: 3, 8, 15

Publication date: 2033-04-16 Date of revision: 2023-05-02

value

	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
Toxicity algae and other aquatic plants	EL50	OECD 201	> 1000 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental valu Growth rate
	EL50	OECD 201	100 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental valu Growth rate
drocarbons, C9-C12, n-alkanes,	isoalkanes, cy	<u>clics, aromatic</u>	<u>s (2-25%)</u>					
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinat
Acute toxicity fishes	LL50	OECD 203	10 mg/l - 30 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental valu Nominal concentration
Acute toxicity crustacea	EL50	OECD 202	10 mg/l - 22 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental valu GLP
Toxicity algae and other	NOEL	OECD 201	0.76 mg/l	96 h	Pseudokirchneri	Static	Fresh water	Experimental valu
aquatic plants					ella subcapitata	system		Growth rate
	EL50	OECD 201	4.1 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental valu Growth rate
Long-term toxicity fish	EC10	Petrotox computer model	0.2 mg/l	60 day(s)	Oncorhynchus mykiss			Estimated value
Long-term toxicity aquatic crustacea	NOEC	OECD 211	0.097 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Read-across; Reproduction
Toxicity aquatic micro- organisms	EC10	Petrotox computer model	25.65 mg/l	15 h	Activated sludge			Estimated value
drocarbons, C9, aromatics								
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinat
Acute toxicity fishes	LL50	OECD 203	9.2 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental valu Nominal concentration
Acute toxicity crustacea	EL50	OECD 202	3.2 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental valu Nominal concentration
Toxicity algae and other aquatic plants	EL50	OECD 201	2.9 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental valu Growth rate
	NOEC	OECD 201	0.07 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental valu Growth rate
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

Conclusion

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

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

	Method	Value	Duration	Value determination
	OECD 301F	80 %; Oxygen consumption	28 day(s)	Experimental value
hyc	lrocarbons, C9-C12, n-alkanes, isoalkanes, cyc	lics, aromatics (2-25%)		

degradation water			
lethod	Value	Duration	Value determination
ECD 301F	74.7 %; GLP	28 day(s)	Read-across
1	ethod	ethod Value ECD 301F 74.7 %; GLP	ethod Value Duration ECD 301F 74.7 %; GLP 28 day(s)

hydrocarbons, C9, aromatics

Bi	odegradation water			
	Method	Value	Duration	Value determination
[OECD 301F	78 %	28 day(s)	Experimental value

Conclusion

Water

Does not contain any not readily biodegradable component(s)

Reason for revision: 3, 8, 15

Publication date: 2033-04-16 Date of revision: 2023-05-02

Revision number: 1200

BIG number: 40675

12.3. Bioaccumulative potential

N

lethod	Remark		Val	ue		Te	mperature	v	alue determination
	Not app	licable (mixture)					•		
vdrocarbons, C9-C	11. n-alkanes. isoall	anes, cyclics, < 2%	aromat	ics					
Log Kow									
Method	Rem	ark		Value			Temperature		Value determination
meenou	nen			> 4			remperature		Estimated value
ydrocarbons, C9-C2	12, n-alkanes, isoall	anes, cyclics, arom	atics (2	-25%)					
BCF fishes									
Parameter	Method	Value		Duration		Species			Value determination
BCF	BCFBAF v3.01	30.85 l/kg - 36	25.07						Estimated value
		l/kg							
Log Kow									-
Method	Rem	ark		Value			Temperature		Value determination
KOWWIN ydrocarbons, C9, ar	romatics			3.2 - 6.7			20 °C		Estimated value
BCF fishes	romatics								
Parameter	Method	Value		Duration		Species			Value determination
BCF	BCFBAF v3.01	39.8 l/kg - 177		Duration		Species Pisces			QSAR
		Fresh weight	.o i/ kg,			13003			
Log Kow	1			•					
Method	Rem	ark		Value			Temperature		Value determination
KOWWIN				2.92 - 3.59			20 °C		QSAR
uaternary ammoni	um compounds, die	coco alkyldimethyl,					,		
BCF other aquatic	organisms								
Parameter	Method	Value		Duration		Species			Value determination
BCF	BCFBAF v3.01	71 l/kg; Fresh	weight						Estimated value
Log Kow									
Method	Rem	ark		Value			Temperature		Value determination
KOWWIN				6.6					Estimated value
.4. Mobility in state of the st	11, n-alkanes, isoall	s) kanes, cyclics, < 2%	aromat	<u>iics</u>					
ontains bioaccumu .4. Mobility in s	soil 11, n-alkanes, isoall		aromat		Fraction	soil	Fraction water	Value dete	ermination
ontains bioaccumu .4. Mobility in s ydrocarbons, C9-C2 Percent distribution Method	soil 11, n-alkanes, isoall on Fraction air	kanes, cyclics, < 2%	Fract sedin	ion nent		soil			
ontains bioaccumu .4. Mobility in s ydrocarbons, C9-C2 Percent distributio Method Mackay level III	soil 11, n-alkanes, isoall on Fraction air 80 %	kanes, cyclics, < 2%	Fract	ion nent	Fraction 3.4 %	soil	Fraction water 3.6 %	Value deto	
ontains bioaccumu .4. Mobility in s ydrocarbons, C9-C2 Percent distribution Method Mackay level III ydrocarbons, C9, a	soil 11, n-alkanes, isoall on Fraction air 80 %	kanes, cyclics, < 2%	Fract sedin	ion nent		soil			
ontains bioaccumu .4. Mobility in s ydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc	soil 11, n-alkanes, isoall on Fraction air 80 %	kanes, cyclics, < 2%	Fract sedin	ion nent	3.4 %	soil	3.6 %		value
ontains bioaccumu ydrocarbons, C9-C2 Percent distributio Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter	soil 11, n-alkanes, isoall on Fraction air 80 %	kanes, cyclics, < 2%	Fract sedin	ion nent	3.4 %	soil	3.6 % Value	Calculated	value Value determination
A. Mobility in sydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc	soil 11, n-alkanes, isoall on Fraction air 80 % romatics	kanes, cyclics, < 2%	Fract sedin 13 %	ion nent Methoc	3.4 %	soil	3.6 %	Calculated	value
A. Mobility in sydrocarbons, C9-C2 Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc uaternary ammoni	soil 11, n-alkanes, isoall on Fraction air 80 % romatics	Fraction biota	Fract sedin 13 %	ion nent Methoc	3.4 %	soil	3.6 % Value	Calculated	value Value determination
A. Mobility in sydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc	soil 11, n-alkanes, isoall on Fraction air 80 % romatics	Fraction biota	Fract sedin 13 %	ion nent Methoc	3.4 %	soil	3.6 % Value	Calculated	value Value determination
A. Mobility in sydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc uaternary ammoni (log) Koc	soil 11, n-alkanes, isoall on Fraction air 80 % romatics	Fraction biota	Fract sedin 13 %	ion nent Methoo es Methoo	3.4 %		3.6 % Value 2.68 - 3	Calculated	value Value determination QSAR
A. Mobility in s ydrocarbons, C9-C? Percent distributio Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc uaternary ammoni (log) Koc Parameter	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, die	Fraction biota	Fract sedin 13 %	ion nent Methoo es Methoo	3.4 %		3.6 % Value 2.68 - 3 Value	Calculated	value Value determination QSAR Value determination
A. Mobility in s ydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc Uaternary ammoni (log) Koc Parameter log Koc	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, die	Fraction biota	Fract sedin 13 % chlorid	ion nent Methoc es Methoc SRC PCK	3.4 %	2.0	3.6 % Value 2.68 - 3 Value	Calculated	value Value determination QSAR Value determination
A. Mobility in s ydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc Parameter log Koc Parameter log Koc Percent distribution Method	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, die on Fraction air	ranes, cyclics, < 2% Fraction biota 0 % cocco alkyldimethyl,	Fract sedin 13 % chlorid	ion nent Methoc es Methoc SRC PCH ion nent	3.4 % d d COCWIN v2	2.0	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in s ydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc Uaternary ammoni (log) Koc Parameter log Koc Parameter log Koc Percent distribution Method Fugacity Model	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, dia on	ranes, cyclics, < 2% Fraction biota 0 % cocco alkyldimethyl,	Fract sedin 13 % chlorid	ion nent Methoc es Methoc SRC PCH ion nent	3.4 %	2.0	3.6 % Value 2.68 - 3 Value 4.5 - 6.7	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in s ydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc Parameter log Koc Parameter log Koc Percent distribution Method	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, die on Fraction air	ranes, cyclics, < 2% Fraction biota 0 % cocco alkyldimethyl,	Fract sedin 13 % chlorid	ion nent Methoc es Methoc SRC PCH ion nent	3.4 % d d COCWIN v2	2.0	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in s ydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc Parameter log Koc Parameter log Koc Percent distribution Method Fugacity Model Level III	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, die on Fraction air	ranes, cyclics, < 2% Fraction biota 0 % cocco alkyldimethyl,	Fract sedin 13 % chlorid	ion nent Methoc es Methoc SRC PCH ion nent	3.4 % d d COCWIN v2	2.0	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in s ydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc Parameter log Koc Parameter log Koc Percent distribution Method Fugacity Model Level III	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, did on Fraction air 0.14 %	ranes, cyclics, < 2% Fraction biota 0 % cocco alkyldimethyl, Fraction biota Fraction biota	Fract sedin 13 %	ion nent Methoc es Methoc SRC PCH ion nent	3.4 % d d COCWIN v2	2.0	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in sydrocarbons, C9-C: Percent distribution Method Mackay level III vdrocarbons, C9, at (log) Koc Parameter log Koc uaternary ammoni (log) Koc Parameter log Koc P	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, die on Fraction air 0.14 % t(s) with potential f	raction biota 0 % coco alkyldimethyl, Fraction biota Fraction biota fraction biota	Fract sedin 13 %	ion nent Methoc es Methoc SRC PCH ion nent	3.4 % d d COCWIN v2	2.0	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in sydrocarbons, C9-C: Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Parameter log Parameter log Parameter log Roc log Parameter log Parameter log Parameter log Roc log Roc l	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, dia um compounds, dia 0.14 % t(s) with potential f BT and vPvB as	ranes, cyclics, < 2% Fraction biota 0% Fraction biota Fraction biota Fraction biota Fraction biota Fraction biota	Fract sedin 13 % chlorid Fract sedin 65 %	ion nent Methoo es SRC PCH ion nent	3.4 % 3.4 % d f COCWIN v2	2.0 soil	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water 3.8 %	Calculated	value Value determination QSAR Value determination Calculated value ermination
A. Mobility in sydrocarbons, C9-C: Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Parameter log Parameter log Parameter log Roc log Parameter log Parameter log Parameter log Roc log Roc l	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, dia um compounds, dia 0.14 % t(s) with potential f BT and vPvB as	ranes, cyclics, < 2% Fraction biota 0% Fraction biota Fraction biota Fraction biota Fraction biota Fraction biota	Fract sedin 13 % chlorid Fract sedin 65 %	ion nent Methoo es SRC PCH ion nent	3.4 % 3.4 % d f COCWIN v2	2.0 soil	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water 3.8 %	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in sydrocarbons, C9-C2 Percent distribution Method Mackay level III vdrocarbons, C9, ar (log) Koc Parameter log Koc Parameter log Koc Parameter log Koc Parameter log Koc Percent distribution Method Fugacity Model Level III ontains componen A.5. Results of P oes not contain of	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, dia um compounds, dia 0.14 % t(s) with potential f BT and vPvB as	kanes, cyclics, < 2%	Fract sedin 13 % chlorid Fract sedin 65 %	ion nent Methoo es SRC PCH ion nent	3.4 % 3.4 % d f COCWIN v2	2.0 soil	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water 3.8 %	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in sydrocarbons, C9-C3 Percent distributio Mackay level III Ma	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, did on Fraction air 0.14 % t(s) with potential f BT and vPvB as component(s) tha	Fraction biota 0% Fraction biota 0% Fraction biota	Fract sedin 13 % chlorid Fract sedin 65 %	ion nent Methoo es SRC PCH ion nent	3.4 % 3.4 % d f COCWIN v2	2.0 soil	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water 3.8 %	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in sydrocarbons, C9-C2 Percent distribution Method Mackay level III ydrocarbons, C9, at (Iog) Koc Parameter log Koc Uaternary ammoni (Iog) Koc Parameter log Koc l	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, dia um compounds, dia 0.14 % t(s) with potential f BT and vPvB as component(s) tha lisrupting properties	Fraction biota 0% Fraction biota 0% Fraction biota	Fract sedin 13 % chlorid Fract sedin 65 %	ion nent Methoo es SRC PCH ion nent	3.4 % 3.4 % d f COCWIN v2	2.0 soil	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water 3.8 %	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in sydrocarbons, C9-C2 Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc Parameter	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, dia um compounds, dia 0.14 % t(s) with potential f BT and vPvB as component(s) tha lisrupting properties	Fraction biota 0% Fraction biota 0% Fraction biota	Fract sedin 13 % chlorid Fract sedin 65 %	ion nent Methoo es SRC PCH ion nent	3.4 % 3.4 % d f COCWIN v2	2.0 soil	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water 3.8 %	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in sydrocarbons, C9-C? Percent distribution Method Mackay level III ydrocarbons, C9, ar (log) Koc Parameter log Koc Parameter log Koc Parameter log Koc Parameter log Koc Percent distribution Fugacity Model Level III Aclusion ontains componen A.5. Results of P oes not contain co action contains componen A.5. Coher advertation Contains componen C.5. Results of P oes not contain co C.6. Endocrine d Contains componen C.7. Other advertation C.5. Results of P OF C.5. Results of P O	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, dia um compounds, dia 0.14 % t(s) with potential f BT and vPvB as component(s) tha lisrupting properties	raction biota 0% Fraction biota 0% Fraction biota 0% Fraction biota Fraction biota Fraction biota Fraction biota for mobility in the sessement t meet(s) the crite Fraction biota	Fract sedin 13 % chlorid Fract sedin 65 %	ion nent Methoo es SRC PCH ion nent	3.4 % 3.4 % d f COCWIN v2	2.0 soil	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water 3.8 %	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in sydrocarbons, C9-C: Percent distribution Method Mackay level III vdrocarbons, C9, ar (log) Koc Parameter log Koc Parameter	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, dia um compounds, dia 0.14 % t(s) with potential f BT and vPvB as component(s) tha lisrupting propa ocrine disrupting pr	Fraction biota 0 % Coco alkyldimethyl, Coco alkyldimethyl, Fraction biota	Fract sedin 13 % chlorid Fract sedin 65 % oil eria of	ion nent Methoc es SRC PCH ion nent	3.4 % 3.4 % d d COCWIN v2 Fraction 31 %	2.0 soil	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water 3.8 % Annex XIII of Re	Calculated	value Value determination QSAR Value determination Calculated value
A. Mobility in sydrocarbons, C9-C: Percent distribution Method Mackay level III vdrocarbons, C9, ar (log) Koc Parameter log Koc Parameter	soil 11, n-alkanes, isoall on Fraction air 80 % romatics um compounds, dia um compounds, dia 0.14 % t(s) with potential f BT and vPvB as component(s) tha lisrupting propa ocrine disrupting pr	raction biota 0% Fraction biota 0% Fraction biota 0% Fraction biota Fraction biota Fraction biota Fraction biota for mobility in the sessement t meet(s) the crite Fraction biota	Fract sedin 13 % chlorid Fract sedin 65 % oil eria of	ion nent Methoc es SRC PCH ion nent	3.4 % 3.4 % d d COCWIN v2 Fraction 31 %	2.0 soil	3.6 % Value 2.68 - 3 Value 4.5 - 6.7 Fraction water 3.8 % Annex XIII of Re	Calculated	value Value determination QSAR Value determination Calculated value

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

<u>hydrocarbons, C9, aromatics</u> 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)

Transport	Not subject
4.2. UN proper shipping name	
4.3. Transport hazard class(es)	
Hazard identification number	
Class	
Classification code	
4. <mark>4. Packing group</mark>	
Packing group	
Labels	
4. <u>5</u> . Environmental hazards	
Environmentally hazardous substance mark	no
4.6. Special precautions for user	
Special provisions	
Limited quantities	
Specific mention	Viscous liquid with flash point ≥23°C and ≤60°C, which meets the conditions indicated in 2.2.3.1.5 of ADR, is not subject to ADR
(RID)	
4. <u>1. UN number</u>	
Transport	Not subject
4.2. UN proper shipping name	
4.3. Transport hazard class(es)	
Hazard identification number	
Class	
Classification code	
4.4. Packing group	

Reason for revision: 3, 8, 15

Packing group Labels

14.5. Environmental hazards

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no

Environmentally hazardous substance mark 14.6. Special precautions for user Special provisions

Special provisions	
Limited quantities	
Specific mention	Viscous liquid with flash point ≥23°C and ≤60°C, which meets the
	conditions indicated in 2.2.3.1.5 of RID, is not subject to RID

Inland waterways (ADN)

Transport	Not subject
4.2. UN proper shipping name	
4.3. Transport hazard class(es)	
Class	
Classification code	
4.4. Packing group	
Packing group	
Labels	
4.5. Environmental hazards	
Environmentally hazardous substance mark	no
4.6. Special precautions for user	
Special provisions	
Limited quantities	
Specific mention	Viscous liquid with flash point ≥23°C and ≤60°C, which meets the conditions indicated in 2.2.3.1.5 of ADN, is not subject to ADN

Sea (IMDG/IMSBC)

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	
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 fo liquids. A package shall not weigh more than 30 kg. (gross mass)
Specific mention	Viscous liquid with flash point ≥23°C and ≤60°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. Maritime transport in bulk according to IMO instruments	
Annex II of MARPOL 73/78	Not applicable, based on available data
ir (ICAO-TI/IATA-DGR) 14.1. UN number/ID number UN number/ID 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
Labels	
14. <u>5. Environmental hazards</u>	
	no
14.5. Environmental hazards	no
14.5. Environmental hazards Environmentally hazardous substance mark	no A3
14.5. Environmental hazards Environmentally hazardous substance mark 14.6. Special precautions for user	

Remark

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture <u>European legislation:</u>

VOC content Directive 2010/75/EU

VOC content

Reason for revision: 3, 8, 15

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

Directive 2012/18/EU (Seveso III) Threshold values under special circ met

Substance or category	Special circumstances	Low tier (tonnes)	Top tier (tonnes)	Group	For this substance or mixture the summation rule has to be applied for:
P5b FLAMMABLE LIQUIDS	Particular processing conditions, such as high pressure or high temperature, may create major- accident hazards	50	200	None	Flammability
P5a FLAMMABLE LIQUIDS	Maintained at a temperature above the boiling point	10	50	None	Flammability
Threshold values under normal of	circumstances				•
Substance or category		Low tier (tonnes)	Top tier (tonnes)	Group	For this substance or mixture the summation rule has to be applied for:
P5c FLAMMABLE LIQUIDS		5000	50000	None	Flammability

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.

C C	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
 hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) hydrocarbons, C9, 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.	 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 wit ornamental aspects, Articles not complying with paragraph 1 shall not be placed on the market. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
 hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) hydrocarbons, C9, aromatics 	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.	 Shall not be used, as substance or as mixtures in aerosol dispensers where these aeroso dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: metallic glitter intended mainly for decoration, artificial snow and frost, "whoopee" cushions, silly string aerosols, mitation excrement, horns for parties, decorative flakes and foams, artificial cobwebs, stilk bombs. 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: "For professional users only". 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. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

National legislation Belgium

Reason for revision: 3, 8, 15

NOVAROOF

No data available

National legislation The Netherlands

Waterbezwaarlijkheid

National legislation France

NOVAROOF

No data available	
hydrocarbons, C9-C11, n-alkanes,	isoalkanes, cyclics, < 2% aromatics
Catégorie cancérogène	Hydrocarbures en C6-C12 (ensemble des,vapeurs)
Catégorie mutagène	Hydrocarbures en C6-C12 (ensemble des,vapeurs)
hydrocarbons, C9, aromatics	
Catégorie cancérogène	Hydrocarbures en C6-C12 (ensemble des,vapeurs)
Catégorie mutagène	Hydrocarbures en C6-C12 (ensemble des,vapeurs)

Z (1); Algemene Beoordelingsmethodiek (ABM)

National legislation Germany

NOVAROOF			
Lagerklasse (TRGS510)	3: Entzündbare Flüssigkeiten		
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/I		
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			
TA-Luft	5.2.5/I		
hydrocarbons, C9, aromatics			
TA-Luft	5.2.5		
guaternary ammonium compounds, dicoco alkyldimethyl, chlorides			
TA-Luft	5.2.5		

National legislation Austria

<u>NOVAROOF</u> No data available

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- and EUH-statements referred to under section 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.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.
- EUH066 Repeated exposure may cause skin dryness or cracking.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate

Reason for revision: 3, 8, 15

GLP	Good Laboratory Practice
LC0	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
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

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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