SAFETY DATA SHEET

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



NOVAFUEL DPF CARE

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

1.1. Product identifier

: NOVAFUEL DPF CARE Product name **Registration number REACH** : Not applicable (mixture)

Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Professional use

Fuel

Fuel: additive

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

₼ +32 14 22 02 66

info@novatio.be

*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.

Industrielaan 5B

B-2250 Olen

2 +32 14 85 97 37

4 +32 14 85 97 38

info@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	lazard statements	
Asp. Tox.	category 1	H304: May be fatal if swallowed and enters airways.	
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.	

2.2. Label elements



Contains: hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics; Distillates (petroleum), hydrotreated light.

Signal word

H-statements

H304 May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects. H412

P-statements

Avoid release to the environment. P273

Do NOT induce vomiting. P331

IF SWALLOWED: Immediately call a POISON CENTER/doctor. P301 + P310

P405 Store locked up.

Supplemental information

EUH066 Repeated exposure may cause skin dryness or cracking.

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel

http://www.big.be © BIG vzw

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Restricted to professional users.

2.3. Other hazards

Contains component(s) that meet(s) the criteria of vPvB as listed in Annex XIII of Regulation (EC) No. 1907/2006

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	lRemark	M-factors and ATE
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics 01-2119457273-39		1	Asp. Tox. 1; H304 EUH066	(1)(10)	Constituent	
2-ethylhexyl nitrate 01-2119539586-27	27247-96-7 248-363-6		Acute Tox. 4; H332 Acute Tox. 4; H312 Acute Tox. 4; H302 Aquatic Chronic 2; H411 EUH066 EUH044	(1)(10)(3)	Constituent	
Distillates (petroleum), hydrotreated light 01-2119484819-18	64742-47-8 265-149-8	2.5% <c<10%< td=""><td>Asp. Tox. 1; H304</td><td>(1)(2)(10)</td><td>Constituent</td><td></td></c<10%<>	Asp. Tox. 1; H304	(1)(2)(10)	Constituent	

- (1) For H- and EUH-statements in full: see section 16
- (2) Substance with a Community workplace exposure limit
- (3) PBT- and/or vPvB-substance
- (10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

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:

No effects known.

After skin contact:

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

After eye contact:

No effects known.

After ingestion:

Risk of aspiration pneumonia.

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).

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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 toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

5.3. Advice for firefighters

5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation 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). 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

No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). 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 inert absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See 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. Gas/vapour heavier than air at 20°C. Avoid prolonged and repeated contact with skin. Remove contaminated clothing immediately. Keep container tightly closed. Do not discharge the waste into the drain.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Meet the legal requirements. Keep container in a well-ventilated place.

7.2.2 Keep away from:

Heat sources, oxidizing agents.

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.

Belgium

Kérosène (en vapeur d'hydrocarbure total) : application limitée	Time-weighted average exposure limit 8 h	200 mg/m ³
aux conditions d'exposition aux aérosols négligeable		

USA (TLV-ACGIH)

Reason for revision: 2; 3; 8; 9; 12

Kerosene/Jet fuels, as total hydrocarbon vapor Time-weighted average exposure limit 8 h (TLV - Adopted Value) 200 mg/	g/m³ (P)
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(P): Application restricted to conditions in which there are negligible aerosol exposures

b) National biological limit values

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

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8.1.2 Sampling methods

Product name	Test	Number
Kerosene (Naphthas)	NIOSH	1550

$\bf 8.1.3$ 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

2-ethylhexyl nitrate

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	0.35 mg/m ³	
	Long-term systemic effects dermal	1 mg/kg bw/day	
	Long-term local effects dermal	44 μg/cm²	

DNEL/DMEL - General population

2-ethylhexyl nitrate

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	87 μg/m³	
	Long-term systemic effects dermal	0.52 mg/kg bw/day	
	Long-term local effects dermal	22 μg/cm²	
	Long-term systemic effects oral	25 μg/kg bw/day	

Distillates (petroleum), hydrotreated light

			
Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects oral	19 mg/kg bw/day	

<u>PNEC</u>

2-ethylhexyl nitrate

Compartments	Value	Remark
Fresh water	0.8 μg/l	
Marine water	0.08 μg/l	
STP	10 mg/l	
Fresh water sediment	0.74 μg/kg sediment dw	
Marine water sediment	0.74 μg/kg sediment dw	
Soil	0.191 μg/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.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. 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

Avoid prolonged and repeated contact with skin. Do not eat, drink or smoke during work.

a) Respiratory protection:

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

b) Hand protection:

Protective gloves against chemicals (EN 374).

	Measured breakthrough time	Thickness	Protection index	Remark
nitrile rubber	> 240 minutes	0.35 mm	Class 5	

c) Eye protection:

Face shield (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
Odour	Characteristic odour
Odour threshold	No data available in the literature
Colour	Light yellow
Particle size	Not applicable (liquid)
Explosion limits	No data available in the literature
Flammability	Not classified as flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available in the literature
Kinematic viscosity	No data available in the literature
Melting point	No data available in the literature

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Boiling point	No data available in the literature
Relative vapour density	No data available in the literature
Vapour pressure	No data available in the literature
Solubility	Water ; insoluble
Relative density	0.82 ; 20 °C
Absolute density	824 kg/m³ ; 20 °C
Decomposition temperature	No data available in the literature
Auto-ignition temperature	No data available in the literature
Flash point	No data available in the literature
рН	Not applicable (non-soluble in water)

9.2. Other information

Explosive properties	Not classified
Oxidising properties	Not classified

SECTION 10: Stability and reactivity

10.1. Reactivity

Heating increases the fire hazard.

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.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

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

NOVAFUEL DPF CARE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	Equivalent to OECD 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	4 h	Rat (male)	Read-across	

2-ethylhexyl nitrate

Route of exposure	Parameter	Method	Value	Exposure time			Remark
						determination	
Oral (repeated	LD50		> 9600 mg/kg		Rat (male /	Experimental value	(maximum
exposure)					female)		achievable
							concentration)
Oral			category 4			Expert judgement	
Dermal	LDLo		> 4800 mg/kg		Rabbit	Experimental value	
Dermal			category 4			Expert judgement	
Inhalation (vapours)	LCL0	Other	> 4.6 mg/l air	75 minutes	Rat (female)	Experimental value	
Inhalation			category 4			Expert judgement	

Classification of this substance is debatable as it does not correspond to the conclusion from the test

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Distillates (petroleum), hydrotreated light

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	OECD 420	> 5000 mg/kg bw		Rat (male /	Experimental value	
					female)		
Dermal	LD50	Equivalent to OECD	> 2000 mg/kg	24 h	Rabbit (male /	Experimental value	
		402	bw/day		female)		
Inhalation (vapours)	LC50	Equivalent to OECD	> 5.28 mg/l air	4 h	Rat (male /	Experimental value	
		403			female)		

Conclusion

Not classified for acute toxicity

Corrosion/irritation

NOVAFUEL DPF CARE

No (test)data on the mixture available

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

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

2-ethylhexyl nitrate

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Not applicable (in vitro test)	Slightly irritating	OECD 437	90 minutes		Bovine eye (in vitro)	Experimental value	
Skin	Not irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

Distillates (petroleum), hydrotreated light

Route of exposure	Result	Method	Exposure time	Time point	 Value determination	Remark
Eye	Not irritating	EPA OTS 798.4500		24; 48; 72 hours	 Experimental value	Single treatment
Skin	Not irritating	OECD 404	4 h	24; 72 hours	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

NOVAFUEL DPF CARE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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

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

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

Distillates (petroleum), hydrotreated light

_	stinates (petrorean)	<i>,,, a</i>	<u>.</u>					
	Route of exposure	Result	Method	Exposure time	Observation time	Species	Value determination	Remark
					point			
	Skin	Not sensitizing	Equivalent to OECD	24 h	24; 48 hours	Guinea pig	Experimental value	
			406			(male)		

Conclusion

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

Specific target organ toxicity

NOVAFUEL DPF CARE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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

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

2-ethylhexyl nitrate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Dermal	NOAEL systemic effects	EPA OPP 82-2	500 mg/kg bw/day		No adverse systemic effects	3 week(s)	` '	Experimental value
Dermal	NOAEC local effects	EPA OPP 82-2	0.22 mg/cm ²	Skin	No effect	21 day(s)	Rabbit (male / female)	Experimental value
Inhalation (vapours)	NOAEC	OECD 413	> 120 ppm			13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value

<u>Distillates</u> (petroleum), hydrotreated light

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value
								determination
Oral (stomach tube)	LOAEL	Subchronic toxicity test	750 mg/kg bw/day		Systemic toxicity	13 weeks (daily)	Rat (male)	Experimental value
Dermal	NOAEL	OECD 410	≥ 0.5 ml/kg bw		No effect	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value
Inhalation (vapours)	NOAEC	Equivalent to OECD 412	≥ 24 mg/m³ air		No effect	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

NOVAFUEL DPF CARE

No (test)data on the mixture available

 $\label{lem:continuous} \mbox{ Judgement is based on the relevant ingredients }$

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

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

2-ethylhexyl nitrate

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

Distillates (petroleum), hydrotreated light

Result	Method	Test substrate	Effect	Value determination	Remark
Negative	Equivalent to OECD 476	Mouse (lymphoma L5178Y	No effect	Experimental value	
		cells)			

Mutagenicity (in vivo)

NOVAFUEL DPF CARE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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

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

Distillates (petroleum), hydrotreated light

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

Conclusion

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Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

NOVAFUEL DPF CARE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	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

2-ethylhexyl nitrate

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

Distillates (petroleum), hydrotreated light

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Dermal	LOAEL	Equivalent to OECD 451	250 mg/kg bw/dav	103 weeks (5 days / week)	Mouse (male / female)	Mortality		Experimental value

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

NOVAFUEL DPF CARE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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

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

2-ethylhexyl nitrate

	Parameter	Method	Value	Exposure time	Species	Effect	- 0	Value determination
Developmental toxicity (Inhalation (vapours))	NOAEC	Equivalent to OECD 414	≥ 850 ppm	19 day(s)	Rat	No effect		Experimental value
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 421	20 mg/kg bw/day	34 day(s) - 47 day (s)	Rat (male / female)	No effect		Experimental value

Distillates (petroleum), hydrotreated light

	Parameter	Method	Value	Exposure time	Species	Effect	- 0	Value determination
Developmental toxicity	NOAEC	OECD 414	≥ 364 ppm	10 days (6h / day)	Rat	No effect		Experimental value
Maternal toxicity	NOAEC	OECD 414	≥ 364 ppm	10 days (6h / day)	Rat	No effect		Experimental value
Effects on fertility	NOAEL		≥ 3000 mg/kg bw/day	90 day(s)	Rat (male)	Reproductive performance		Experimental value

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

Classification is based on the relevant ingredients May be fatal if swallowed and enters airways.

Toxicity other effects

NOVAFUEL DPF CARE

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

Pa	rameter	Method	Value	Organ	Effect	Exposure time	 Value determination
				Skin	Skin dryness or cracking		Literature study Skin

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Distillates (petroleum), hydrotreated light

Parameter	Method	Value	Organ	Effect	Exposure time	- •	Value determination
NOAEC		1200 mg/m³ air	Central nervous system		6 weeks (6h / day, 5 days / week)	Rat (male)	Experimental value Inhalation (vapours)
NOAEL	Other	> 495 mg/kg bw/day		Weakening of the immune system	28 day(s)	Rat (female)	Experimental value Dermal

Conclusion

Repeated exposure may cause skin dryness or cracking.

Chronic effects from short and long-term exposure

NOVAFUEL DPF CARE

No effects known.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

NOVAFUEL DPF CARE

No (test)data on the mixture available

Classification is based on the relevant ingredients

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

	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	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value; GLP
	NOELR	OECD 201	1000 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value; GLP
Toxicity aquatic micro- organisms	EL50		> 1000 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR

2-ethylhexyl nitrate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	2 mg/l	96 h	Danio rerio	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EC50	OECD 202	> 12.6 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	ErC50	OECD 201	3.22 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea								Data waiving
Toxicity aquatic micro- organisms	EC50	OECD 209	> 1000 mg/l	3 h	Activated sludge			Experimental value; Growth

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

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

Biodegradation water

Method	Value	Duration	Value determination					
OECD 301F	80 %; GLP	28 day(s)	Read-across					
iodegradation soil								

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

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2-ethylhexyl nitrate

Biodegradation water

Method	Value	Duration	Value determination
OECD 310	0 %; Carbon dioxide	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	19.896 h	1.5E6 /cm³	Calculated value

Conclusion

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

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Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

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

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available in the			
	literature			

2-ethylhexyl nitrate

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	OECD 305	1332 l/kg		Pisces	QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		5.24	40 °C	Experimental value

Distillates (petroleum), hydrotreated light

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.01	207.7 l/kg; Fresh			Estimated value
		weight			

Log Kow

Method	Remark	Value	Temperature	Value determination
KOWWIN		6.23		Estimated value

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

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

(log) Koc

Parameter	Method	Value	Value determination
log Koc		4.16	Read-across

Percent distribution

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

2-ethylhexyl nitrate

(log) Koc

	Method Value Value determination OECD 121 3.75 Experimental value		
Parameter	Method	Value	Value determination
log Koc		3.75	Experimental value

Distillates (petroleum), hydrotreated light

Percent distribution

						
Method	Fraction air			Fraction soil	Fraction water	Value determination
			sediment			
Fugacity Model	22.4 %		6.15 %	2.51 %	69 %	Calculated value
Level II						

Conclusion

Contains component(s) that adsorb(s) into the soil Contains component(s) with potential for mobility in the soil

12.5. Results of PBT and vPvB assessment

Contains component(s) that meet(s) the criteria of vPvB as listed in Annex XIII of Regulation (EC) No. 1907/2006.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

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12.7. Other adverse effects

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Greenhouse gases

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

Ozone-depleting potential (ODP)

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

Groundwater

Groundwater pollutant

Distillates (petroleum), hydrotreated light

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. The waste code must be assigned by the user, preferably in consultation with the (environmental) authorities concerned.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Should not be landfilled with household waste. 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 Not subject Transport 14.2. UN proper shipping name 14.3. Transport hazard class(es) Hazard identification number Classification code 14.4. Packing group Packing group Labels 14.<u>5. Environmental hazards</u> Environmentally hazardous substance mark lno 14.6. Special precautions for user Special provisions Limited quantities Rail (RID) 14.1. UN number Not subject Transport 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

Inland waterways (ADN)

14.1. UN number

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NOVAFUEL DPF CARE UN number 14.2. UN proper shipping name environmentally hazardous substance, liquid, n.o.s. Proper shipping name 14.3. Transport hazard class(es) Class Classification code 14.4. Packing group Packing group Labels 14.<u>5. Environmental hazards</u> Environmentally hazardous substance mark no 14.6. Special precautions for user Special provisions Limited quantities Sea (IMDG/IMSBC) 14.1. UN number Not subject Transport 14.2. UN proper shipping name 14.3. Transport hazard class(es) Class 14.4. Packing group Packing group Labels 14.5. Environmental hazards Marine pollutant Environmentally hazardous substance mark 14.6. Special precautions for user Special provisions Limited quantities 14.7. Maritime transport in bulk according to IMO instruments Annex II of MARPOL 73/78 Not applicable, based on available data Air (ICAO-TI/IATA-DGR) 14.1. UN number Transport Not subject 14.2. UN proper shipping name 14.3. Transport hazard class(es) Class 14.4. Packing group Packing group Labels 14.<u>5. Environmental hazards</u> Environmentally hazardous substance mark lno 14.6. Special precautions for user Special provisions Passenger and cargo transport Limited quantities: maximum net quantity per packaging

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
100 %	

REACH Annex XVII - Restriction

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

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics 2-ethylhexyl nitrate Distillates (petroleum), hydrotreated light	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	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with H304,

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effects, 3.9 an	d 3.10; 4. Dec	corative oil lamps for supply to the general public shall not be placed on the market
(c) hazard clas	s 4.1; unless	s they conform to the European Standard on Decorative oil lamps (EN 14059) adopted
(d) hazard clas	s 5.1. by the	European Committee for Standardisation (CEN).
	5. Wit	thout prejudice to the implementation of other Community provisions relating to the
	classif	fication, packaging and labelling of dangerous substances and mixtures, suppliers shall
	ensure	e, before the placing on the market, that the following requirements are met:
	a) lam	np oils, labelled with H304, intended for supply to the general public are visibly, legibly
	and in	ndelibly marked as follows: "Keep lamps filled with this liquid out of the reach of
	childre	en"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of
	lamps	s — may lead to life- threatening lung damage";
	b) gril	l lighter fluids, labelled with H304, intended for supply to the general public are legibly
	and in	ndelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to
	life th	reatening lung damage";
	c) lam	p oils and grill lighters, labelled with H304, intended for supply to the general public
	are pa	ackaged in black opaque containers not exceeding 1 litre by 1 December 2010.

National legislation Belgium

NOVAFUEL DPF CARE

No data available

Distillates (petroleum), hydrotreated light

Résorption peau	Kérosène (en vapeur d'hydrocarbure total) : application limitée aux conditions d'exposition aux aérosols négligeable; D;
	La mention "D" signifie que la résorption de l'agent, via la peau, les muqueuses ou les yeux, constitue une partie
	importante de l'exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l'agent dans
	l'air.

National legislation The Netherlands NOVAFUEL DPF CARE

	. (0)
lWaterbezwaarliikheid	IA (2): Algemene Beoordelingsmethodiek (ABM)
Water Dezwaar iijkiieiu	A (2), Algeriana decordeningsmethodiak (Adivi)

National legislation France NOVAFUEL DPF CARE

No data available

NOVAFUEL DPF CARE

	WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017			
<u>h</u>	hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics				
	TA-Luft	5.2.5			
2	-ethylhexyl nitrate				
	TA-Luft	5.2.5/I			
D	Distillates (petroleum), hydrotreated light				
	TA-Luft	5.2.5/I			
	TRGS900 - Risiko der	Destillate (Erdöl), mit Wasserstoff behandelt leichte (C9 – C14 Aliphaten); Y; Risiko der Fruchtschädigung braucht bei			
	Fruchtschädigung	Finhaltung des Arheitsplatzgrenzwertes und des higlogischen Grenzwertes nicht hefürchtet zu werden			

National legislation United Kingdom

NOVAFUEL DPF CARE

No data available

Other relevant data NOVAFUEL DPF CARE

No data available

Distillates (petroleum), hydrotreated light

IARC - classification	3; Fuel oils, distillate (light)		
TLV - Skin absorption	Kerosene/Jet fuels, as total hydrocarbon vapor; Skin; Danger of cutaneous absorption		
	Kerosene/Jet fuels, as total hydrocarbon vapor; Skin; Danger of cutaneous absorption		
TLV - Carcinogen	nogen Kerosene/Jet fuels, as total hydrocarbon vapor; A3		
	Kerosene/Jet fuels, as total hydrocarbon vapor; A3		
IARC - classification 3; Mineral oils, highly-refined			

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:

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

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.

EUH044 Risk of explosion if heated under confinement.

(*) INTERNAL CLASSIFICATION BY BIG

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ADI Acceptable daily intake

AOEL Acceptable operator exposure level

ATE Acute Toxicity Estimate

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

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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