SAFETY DATA SHEET



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

NOVAFLUSH ENGINE

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

1.1. Product identifier

Product name : NOVAFLUSH ENGINE
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

Engine oil: additive

Internal combustion engine: cleansing product
Detergent according to Regulation (EC) No 648/2004

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

♣ +32 14 85 97 38 info@novatech.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch):

+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Class	Category	Hazard statements
Asp. Tox.	category 1	H304: May be fatal if swallowed and enters airways.

2.2. Label elements



 $Contains: \ hydrocarbons, \ C11-C14, \ n-alkanes, \ isoalkanes, \ cyclics, <2\% \ aromatics; \ white \ mineral \ oil \ (petroleum).$

Signal word Danger

H-statements

H304 May be fatal if swallowed and enters airways.

P-statements

P331 Do NOT induce vomiting.

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

P405 Store locked up.

Supplemental information

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Caution! Substance is absorbed through the skin

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel

http://www.big.be © BIG vzw

Reason for revision: 878

Publication date: 2013-06-04 Date of revision: 2024-10-13

378-16239-06

Revision number: 0500 BIG number: 44636

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	lRemark	M-factors and ATE
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics 01-2119456620-43	926-141-6	C≤60%	Asp. Tox. 1; H304 EUH066	(1)(10)	Constituent	
white mineral oil (petroleum) 01-2119487078-27	8042-47-5 232-455-8	C≤40%	Asp. Tox. 1; H304	(1)(2)(10)	Constituent	

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

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:

No effects known.

After skin contact

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

After eye contact:

Redness of the eye tissue.

After ingestion:

Risk of aspiration pneumonia. Headache. Dizziness. Nausea. Drowsiness.

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: CO and CO2 are formed.

5.3. Advice for firefighters

5.3.1 Instructions:

Reason for revision: 878 Publication date: 2013-06-04
Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 2/12

⁽²⁾ Substance with a Community workplace exposure limit

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

No specific fire-fighting instructions required.

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. Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.

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.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into inert absorbent material. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

See 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. Observe normal hygiene standards. Avoid prolonged and repeated contact with skin. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

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

7.2.2 Keep away from:

Heat sources, oxidizing agents, reducing agents, (strong) acids, (strong) bases.

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.

Client-specific limit values

(1) (I): Inhalable fraction

Dearom. Mineral spirits 140 - 220	Time-weighted avera	nge exposure limit 8 h (EU HSPA)	1050 mg/m ³	
Belgium				
Huiles minérales (brouillards)		Time-weighted average exposure limit 8 h	1	5 mg/m³
		Short time value		10 mg/m³
The Netherlands				
Olienevel (minerale olie)		Time-weighted average exposure limit 8 h limit value)	n (Public occupational expo	sure 5 mg/m³
Germany				
Weißes Mineralöl (Erdöl)		Time-weighted average exposure limit 8 h	n (TRGS 900)	5 mg/m³ (1)
(1) Alveolengängige Fraktion; UF: 4	(11)			
USA (TLV-ACGIH)				
Mineral oil, excluding metal working and severely refined	ng fluids: Pure, highly	Time-weighted average exposure limit 8 h	n (TLV - Adopted Value)	5 mg/m³ (1)

Reason for revision: 878 Publication date: 2013-06-04
Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 3 / 12

b) National biological limit values

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

8.1.2 Sampling methods

Product name	Test	Number
Oil Mist (Mineral)	NIOSH	5026

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

white mineral oil (petroleum)

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	164.56 mg/m³	
	Long-term systemic effects dermal	217.05 mg/kg bw/day	

DNEL/DMEL - General population

white mineral oil (petroleum)

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	34.78 mg/m³	
	Long-term systemic effects dermal	93.02 mg/kg bw/day	
	Long-term systemic effects oral	25 mg/kg bw/day	

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 Observe normal hygiene standards. 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	> 480 minutes	0.35 mm	Class 6	

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

ml 1 1 C	
Physical form	Liquid
Colour	Colourless
Odour	Characteristic odour
Odour threshold	No data available in the literature
Melting point	No data available in the literature
Boiling point	190 °C - 300 °C
Flammability	Not classified as flammable
Explosion limits	0.60 - 5.50 vol %
Flash point	70 °C
Auto-ignition temperature	236 °C
Decomposition temperature	No data available in the literature
рН	No data available in the literature
Kinematic viscosity	1 mm²/s ; 40 °C
Dynamic viscosity	1 mPa.s ; 20 °C
Solubility	Water ; insoluble
Log Kow	Not applicable (mixture)
Vapour pressure	0.6 hPa ; 20 °C
Absolute density	830 kg/m³ ; 20 °C
Relative density	0.83 ; 20 °C
Relative vapour density	No data available in the literature
Particle size	Not applicable (liquid)

9.2. Other information

Reason for revision: 878 Publication date: 2013-06-04

Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 4/12

Evaporation rate 0.010; Butyl acetate

SECTION 10: Stability and reactivity

10.1. Reactivity

Temperature above flashpoint: higher fire/explosion 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, reducing agents, (strong) acids, (strong) bases.

10.6. Hazardous decomposition products

Upon combustion: CO and CO2 are formed.

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

NOVAFLUSH ENGINE

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	ATE		> 2000 mg/kg bw			Calculated value	
Dermal	ATE		> 2000 mg/kg bw			Calculated value	

Judgement is based on the relevant ingredients

<u>hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics</u>

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	Equivalent to OECD	> 15000 mg/kg bw		Rat (male /	Experimental value	
		401			female)		
Dermal	LD50	Equivalent to OECD	≥ 3160 mg/kg bw	24 h	Rabbit (male /	Read-across	
		402			female)		
Inhalation (vapours)	LC50	Equivalent to OECD	> 6.1 mg/l air	4 h	Rat (male /	Read-across	
		403	_		female)		

white mineral oil (petroleum)

Route of exposure	Parameter	Method	Value	Exposure time			Remark
						determination	
Oral	LD50	Equivalent to OECD	> 5000 mg/kg bw		Rat (male /	Read-across	
		401	G. G		female)		
Dermal	LD50	Equivalent to OECD	> 2000 mg/kg bw	24 h	Rabbit (male /	Read-across	
		402			female)		
Inhalation (aerosol)	LC50	Equivalent to OECD	> 5 mg/l	4 h	Rat (male /	Read-across	
		403			female)		

Conclusion

Not classified for acute toxicity

Corrosion/irritation

NOVAFLUSH ENGINE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

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

Reason for revision: 878 Publication date: 2013-06-04
Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 5 / 12

white mineral oil (petroleum)

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

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

NOVAFLUSH ENGINE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C11-C14, 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	

white mineral oil (petroleum)

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

Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

Specific target organ toxicity

NOVAFLUSH ENGINE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value	Remark
							determination	
Oral (stomach	NOAEL	Equivalent to	≥ 1000 mg/kg	No effect	13 weeks (daily)	Rat (male /	Experimental	
tube)		OECD 408	bw/day			female)	value	
Dermal							Data waiving	
Inhalation	NOAEC	Equivalent to	≥ 6000 mg/m ³	No effect	13 weeks (6h /	Rat (male /	Experimental	
(vapours)		OECD 413	air		day, 5 days /	female)	value	
					week)			

white mineral oil (petroleum)

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (diet)	NOAEL	OECD 453	≥ 1200 mg/kg bw/day	No effect	24 month(s)	Rat (male / female)	Read-across	
Dermal	NOAEL systemic effects	OECD 411	≥ 2000 mg/kg bw/day	No adverse systemic effects	13 weeks (daily)	Rat (male / female)	Read-across	
Dermal	NOAEL local effects	OECD 411	< 125 mg/kg bw/day	Skin (no effect)	13 weeks (daily)	Rat (male / female)	Read-across	
Inhalation (aerosol)	NOEL	Equivalent to OECD 412	50 mg/m ³	Lungs (no effect)	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across	
Inhalation (aerosol)	LOEL	Equivalent to OECD 412	210 mg/m ³	Lungs (weight changes)	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across	

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

NOVAFLUSH ENGINE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Reason for revision: 878 Publication date: 2013-06-04 Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 6/12

hydrocarbons, C11-C14, 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)		Read-across	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Human lymphocytes		Experimental value	

white mineral oil (petroleum)

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

Mutagenicity (in vivo)

NOVAFLUSH ENGINE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Oral (stomach	Equivalent to OECD 474		Mouse (male /	No effect	Experimental value	Single treatment
tube))			female)			

white mineral oil (petroleum)

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Intraperitoneal)	OECD 474		Mouse (male /	Bone marrow (no	Read-across	Single
			female)	effect)		intraperitoneal
						injection

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

NOVAFLUSH ENGINE

No (test)data on the mixture available

Judgement is based on the relevant ingredients

<u>hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics</u>

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Dermal	NOAEL	Carcinogenic toxicity study	50 %	No carcinogenic effect	52 week(s)	Mouse (male)	Experimental value	

white mineral oil (petroleum)

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation (aerosol)	Dose level	Carcinogenic toxicity study	100 mg/m ³	No carcinogenic effect	68 weeks (6h / day, 7 days / week)	Mouse (male)	Read-across	
Dermal	NOEL	OECD 453	≥ 75 µl/week	No carcinogenic effect	104 weeks (3 times / week)	Mouse (male)	Read-across	
Oral (diet)	NOAEL	OECD 453	≥ 1200 mg/kg bw/day	No carcinogenic effect	24 month(s)	Rat (male / female)	Read-across	

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

NOVAFLUSH ENGINE

No (test)data on the mixture available

Judgement is based on the relevant ingredients hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value	Remark
							determination	
Developmental toxicity	NOAEC	Equivalent to	≥ 5220	10 days (6h / day)	Rat	No effect	Read-across	
(Inhalation (vapours))		OECD 414	mg/m³ air					
Maternal toxicity	NOAEC	Equivalent to	≥ 5220	10 days (6h / day)	Rat	No effect	Read-across	
(Inhalation (vapours))		OECD 414	mg/m³ air					

Reason for revision: 878 Publication date: 2013-06-04 Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 7 / 12

white mineral oil (petroleum)

Category	Parameter	Method	Value	Exposure time	Species		Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	> 5000 mg/kg bw/day	14 days (gestation, daily)	Rat	No effect	Read-across	
Maternal toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	> 5000 mg/kg bw/day	14 days (gestation, daily)	Rat	No effect	Read-across	
Effects on fertility (Dermal)	NOAEL	Equivalent to OECD 415	≥ 2000 mg/kg bw/day	≥ 13 weeks (5 days / week)	Rat (male / female)	No effect	Read-across	

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

NOVAFLUSH ENGINE

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

Toxicity other effects

NOVAFLUSH ENGINE

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

Conclusion

Repeated exposure may cause skin dryness or cracking.

Chronic effects from short and long-term exposure

NOVAFLUSH ENGINE

No effects known.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

NOVAFLUSH ENGINE

No (test)data on the mixture available

 $\label{lem:lement} \mbox{ Judgement of the mixture is based on the relevant ingredients}$

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

	Parameter	Method	Value	Duration	Species		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; Nominal concentration
Acute toxicity crustacea	EL50	OECD 202	> 1000 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	EL50	OECD 201	> 1000 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system		Experimental value; Growth rate
Toxicity aquatic micro-organisms	EC10	OECD 209	> 1000 mg/l	3 h	Activated sludge	Static system	Fresh water	Read-across; GLP

white mineral oil (petroleum)

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	> 100 mg/l WAF	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	LL50	OECD 202	> 100 mg/l WAF	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	NOEL	OECD 201	≥ 100 mg/l WAF	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Weight of evidence; Growth rate
Long-term toxicity fish	NOEL		≥ 1000 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR; Nominal concentration
Long-term toxicity aquatic crustacea	NOEL	Equivalent to OECD 211	10 mg/l WAF	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Read-across; GLP

Conclusion

Reason for revision: 878 Publication date: 2013-06-04

Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 8 / 12

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

12.2. Persistence and degradability

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	89.8 %; GLP	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	11.6 h	1.5E6 /cm ³	Calculated value

white mineral oil (petroleum)

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	31 %; GLP	28 day(s)	Read-across

Conclusion

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

NOVAFLUSH ENGINE

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

BCF fishes

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

Log Kow

Method	Remark	Value	Temperature	Value determination
KOWWIN		1.99 - 7.71	20 °C	QSAR

white mineral oil (petroleum)

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.01	1216 l/kg; Fresh			Estimated value
		weight			

Log Kow

Method	Remark	Value	Temperature	Value determination
		5.2		Experimental value

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

(log) Koc

Method Value Value determination	Parameter
4.16 Read-across	log Koc
4.10 Neau-aci 055	log koc

white mineral oil (petroleum)

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	2.6	Calculated value

Percent distribution

Method	Fraction air	 Fraction sediment	Fraction soil	Fraction water	Value determination
,	32 %	0.87 %	1.3 %	66 %	Calculated value
Level III					

Conclusion

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

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

NOVAFLUSH ENGINE

Greenhouse gases

Reason for revision: 878 Publication date: 2013-06-04
Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 9 / 12

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

Groundwater

Groundwater pollutant

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

Groundwater

Groundwater pollutant

white mineral oil (petroleum)

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

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. 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), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14.	4.1. UN number or ID number					
	Transport	Not subject				
14.	2. UN proper shipping name					
14.	3. Transport hazard class(es)					
	Hazard identification number					
	Class					
	Classification code					
14.4. Packing group						
	Packing group					
	Labels					
14.5. Environmental hazards						
	Environmentally hazardous substance mark	no				
14.	14.6. Special precautions for user					
	Special provisions					
	Limited quantities					
14.	14.7. Maritime transport in bulk according to IMO instruments					
	Annex II of MARPOL 73/78	Not applicable, based on available data				

SECTION 15: Regulatory information

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	Remark
60.00 %	
498.00 g/l	

Reason for revision: 878 Publication date: 2013-06-04
Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 10 / 12

Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

Ingredients according to Regulation (EC) No 648/2004 and amendments

≥30% aliphatic hydrocarbons

REACH Candidate list

Does not contain component(s) included in candidate list of substances of very high concern (SVHC) for authorisation (Article 59 of Regulation (EC) No 1907/2006)

REACH Annex XIV - Authorisation

Does not contain component(s) included in Annex XIV of Regulation (EC) No 1907/2006: list of substances subject to authorisation

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, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics · white mineral oil (petroleum)	Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage"; b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.

National legislation Belgium

NOVAFLUSH ENGINE

No data available

white mineral oil (petroleum)

Agents cancérigènes,	huiles minérales; VI.2.2.; Liste des procédés au cours desquels une substance ou un mélange se dégage; Travaux
mutagènes et reprotoxiques et	entraînant une exposition cutanée à des huiles minérales qui ont été auparavant utilisées dans des moteurs à combustion
aux agents possédant des	interne pour lubrifier et refroidir les pièces mobiles du moteur.
propriétés perturbant le	
système endocrinien (Code du	
bien-être au travail, Livre VI,	
titre 2)	

National legislation The Netherlands

NOVAFLUSH ENGINE

Waterbezwaarlijkheid A (4); Algemene Beoordelingsmethodiek (ABM)

National legislation France

NOVAFLUSH ENGINE

No data available

National legislation Germany NOVAFLUSH ENGINE

	WGK	1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017				
<u>h</u>	hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics					
	TA-Luft	5.2.5/I				
W	white mineral oil (petroleum)					
	TA-Luft	5.2.5/I				
	TRGS900 - Risiko der	Weißes Mineralöl (Erdöl); Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des				
	Fruchtschädigung	hiologischen Grenzwertes nicht hefürchtet zu werden				

National legislation Austria NOVAFLUSH ENGINE

Reason for revision: 878 Publication date: 2013-06-04

Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 11 / 12

No data available

National legislation United Kingdom

No data available

National legislation Ireland

NOVAFLUSH ENGINE

No data available

Other relevant data

NOVAFLUSH ENGINE

No data available

white mineral oil (petroleum)

TLV - Carcinogen

Mineral oil, excluding metal working fluids: Pure, highly and severely refined; A4

15.2. Chemical safety assessment

No chemical safety assessment is required for a mixture.

SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

H304 May be fatal if swallowed and enters airways.

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 DNFI Derived No Effect Level EC10 Effect Concentration 10 % EC50 Effect Concentration 50 %

ErC50 EC50 in terms of reduction of growth rate

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 Organisation for Economic Co-operation and Development OECD

PRT 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.

Reason for revision: 878 Publication date: 2013-06-04 Date of revision: 2024-10-13

Revision number: 0500 BIG number: 44636 12 / 12