SAFETY DATA SHEET

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

NOVALUBE CERAMIC H1 AEROSOL

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

1.1. Product identifier

Product name : NOVALUBE CERAMIC H1 AEROSOL
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Lubricant

1.2.2 Uses advised against

No uses advised against

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
🖷 +32 14 22 02 66
info@novatio.be
*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
🖷 +32 14 85 97 38
info@tec7.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Class	Category	Hazard statements
Aerosol	category 1	H222: Extremely flammable aerosol.
Aerosol	category 1	H229: Pressurised container: May burst if heated.
Skin Irrit.	category 2	H315: Causes skin irritation.
Eye Irrit.	category 2	H319: Causes serious eye irritation.
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.

2.2. Label elements


Signal word Danger
H-statements
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.
P-statements
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.

P280	Wear protective gloves, protective clothing and eye protection/face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F.

2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard

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	Remark
propan-2-ol 01-2119457558-25	67-63-0 200-661-7	C<2%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent
calciumdihydroxide	1305-62-0 215-137-3	C<2%	Eye Dam. 1; H318 Skin Irrit. 2; H315	(1)(2)	Constituent
mixture of butane/propane	61641-74-5	40%<C<50%	Flam. Gas 1; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant
naphtha (petroleum), hydrotreated light 01-2119475133-43	64742-49-0 265-151-9	15%<C<19%	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(2)(10)	Constituent

(1) For H-statements in full: see heading 16
(2) Substance with a Community workplace exposure limit
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

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

After inhalation:

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

After skin contact:

Wash immediately with lots of water. Soap may be used. Do not apply (chemical) neutralizing agents without medical advice. Take victim to a doctor if irritation persists.

After eye contact:

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

After ingestion:

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

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

4.2.1 Acute symptoms

After inhalation:

EXPOSURE TO HIGH CONCENTRATIONS: Narcosis.

After skin contact:

Tingling/irritation of the skin.

After eye contact:

Irritation of the eye tissue.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

4.3. Indication of any immediate medical attention and special treatment needed

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

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

5.1.2 Unsuitable extinguishing media:

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

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

5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO2 are formed. Pressurised container: May burst if heated.

5.3. Advice for firefighters

5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistant risk of physical explosion. 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. Protective goggles. Head/neck protection. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Protective goggles. Head/neck protection. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

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, e.g.: sand/kieselguhr. 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 heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Gas/vapour heavier than air at 20°C. Observe normal hygiene standards.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

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

7.2.2 Keep away from:

Heat sources, ignition sources, oxidizing agents.

7.2.3 Suitable packaging material:

Aerosol.

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

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

EU

Calcium dihydroxide	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1 mg/m³ (2)
	Short time value (Indicative occupational exposure limit value)	4 mg/m³ (2)

(2): Respirable fraction

Belgium

Alcool isopropylique	Time-weighted average exposure limit 8 h	200 ppm
	Time-weighted average exposure limit 8 h	500 mg/m³
	Short time value	400 ppm
	Short time value	1000 mg/m³
Calcium (dihydroxyde de) (fraction alvéolaire)	Time-weighted average exposure limit 8 h	1 mg/m³
	Short time value	4 mg/m³
Huiles minérales (brouillards)	Time-weighted average exposure limit 8 h	5 mg/m³
	Short time value	10 mg/m³
Hydrocarbures aliphatiques sous forme gazeuse: (Alcanes C1-C3)	Time-weighted average exposure limit 8 h	1000 ppm
	Short time value	980 ppm
	Short time value	2370 mg/m³

The Netherlands

Calciumdihydroxide	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1 mg/m³
	Short time value (Public occupational exposure limit value)	4 mg/m³
Olienevel (minerale olie)	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	5 mg/m³

France

Alcool isopropylique	Short time value (VL: Valeur non réglementaire indicative)	400 ppm
	Short time value (VL: Valeur non réglementaire indicative)	980 mg/m³
Calcium (hydroxyde de)	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	5 mg/m³
n-Butane	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	800 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1900 mg/m³

Germany

Butan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m³
Calciumdihydroxid	Time-weighted average exposure limit 8 h (TRGS 900)	1 mg/m³
Propan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1800 mg/m³
Propan-2-ol	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	500 mg/m³

UK

Butane	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	600 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1450 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	750 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1810 mg/m³
Calcium hydroxide (Respirable fraction)	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	4 mg/m³
Calcium hydroxide	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	5 mg/m³
Propan-2-ol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	400 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	999 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1250 mg/m³

USA (TLV-ACGIH)

2-propanol	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	200 ppm
	Short time value (TLV - Adopted Value)	400 ppm
Butane, all isomers	Short time value (TLV - Adopted Value)	1000 ppm
Calcium hydroxide	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	5 mg/m³

Mineral oil, pure, highly and severely refined	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	5 mg/m³ (I)

(I): Inhalable fraction

b) National biological limit values

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

Germany

Propan-2-ol (Aceton)	Urin: expositionsende, bzw. schichtende	25 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Propan-2-ol (Aceton)	Vollblut: expositionsende, bzw. schichtende	25 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Vitamin K-Antagonisten (Quick-Wert)	Vollblut: keine beschränkung	Reduktion auf nicht weniger als 70%	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG

USA (BEI-ACGIH)

2-Propanol (Acetone)	Urine: end of shift at end of workweek	40 mg/L	

8.1.2 Sampling methods

Product name	Test	Number
Calciumdihydroxide	NIOSH	7020
Isopropanol (Volatile Organic compounds)	NIOSH	2549
Isopropyl Alcohol (Alcohols I)	NIOSH	1400
Isopropyl Alcohol	OSHA	109
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

propan-2-ol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	500 mg/m³	
	Long-term systemic effects dermal	888 mg/kg bw/day	

naphtha (petroleum), hydrotreated light

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Acute systemic effects inhalation	1286.4 mg/m³	
	Long-term local effects inhalation	837.5 mg/m³	
	Acute local effects inhalation	1066.67 mg/m³	

DNEL/DMEL - General population

propan-2-ol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	89 mg/m³	
	Long-term systemic effects dermal	319 mg/kg bw/day	
	Long-term systemic effects oral	26 mg/kg bw/day	

naphtha (petroleum), hydrotreated light

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Acute systemic effects inhalation	1152 mg/m³	
	Long-term local effects inhalation	178.57 mg/m³	
	Acute local effects inhalation	640 mg/m³	

PNEC

propan-2-ol

Compartments	Value	Remark
Fresh water	140.9 mg/l	
Marine water	140.9 mg/l	
Fresh water (intermittent releases)	140.9 mg/l	
STP	2251 mg/l	
Fresh water sediment	552 mg/kg sediment dw	
Marine water sediment	552 mg/kg sediment dw	
Soil	28 mg/kg soil dw	
Oral	160 mg/kg food	

calciumdihydroxide

Compartments	Value	Remark
Fresh water	0.49 mg/l	
Marine water	0.32 mg/l	
Aqua (intermittent releases)	0.49 mg/l	
STP	3 mg/l	
Soil	1080 mg/kg soil dw	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer. The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

a) Respiratory protection:

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

b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Remark	Protection index
nitrile rubber	> 480 minutes	0.4 mm	Class 6

c) Eye protection:

Protective goggles.

d) Skin protection:

Head/neck protection. Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Aerosol
Odour	Solvent-like odour
Odour threshold	No data available in the literature
Colour	White
Particle size	Not applicable (liquid)
Explosion limits	No data available in the literature
Flammability	Extremely flammable aerosol.
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
Boiling point	No data available in the literature
Evaporation rate	No data available in the literature
Relative vapour density	> 1
Vapour pressure	No data available in the literature
Solubility	Water ; insoluble
Relative density	1.4 ; 20 °C ; Calculated
Decomposition temperature	No data available in the literature
Auto-ignition temperature	No data available in the literature
Flash point	Not applicable (aerosol)
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available in the literature

9.2. Other information

Absolute density	1400 kg/m³ ; 20 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Unstable on exposure to heat.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Upon combustion: CO and CO2 are formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

NOVALUBE CERAMIC H1 AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	5840 mg/kg bw		Rat	Experimental value	
Dermal	LD50	Equivalent to OECD 402	16400 mg/kg bw	24 h	Rabbit	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 10000 ppm	6 h	Rat (male / female)	Experimental value	

naphtha (petroleum), hydrotreated light

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	> 5000 mg/kg bw		Rat (male / female)	Read-across	
Dermal	LD50	Equivalent to OECD 402	> 2000 mg/kg bw	24 h	Rabbit (male / female)	Read-across	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 5610 mg/m³ air	4 h	Rat (male / female)	Read-across	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

NOVALUBE CERAMIC H1 AEROSOL

No (test)data on the mixture available

Classification is based on the relevant ingredients

propan-2-ol

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

calciumdihydroxide

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage; category 1					Literature study	
Skin	Irritating	OECD 404	4 h	1; 24; 48; 72 hours	Rabbit	Experimental value	

naphtha (petroleum), hydrotreated light

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Single treatment
Skin	Irritating	OECD 404	4 h	1; 24; 48; 72; 168 hours	Rabbit	Read-across	
Inhalation (vapours)	Not irritating		1 h		Human	Experimental value	

Conclusion

Causes skin irritation.

Causes serious eye irritation.

Respiratory or skin sensitisation

NOVALUBE CERAMIC H1 AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

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

naphtha (petroleum), hydrotreated light

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406	6 h	24; 48 hours	Guinea pig (male)	Experimental value	

Conclusion

Not classified as sensitizing for skin

Specific target organ toxicity

NOVALUBE CERAMIC H1 AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral								Data waiving
Dermal								Data waiving
Inhalation (vapours)	NOAEC	OECD 451	5000 ppm		No effect	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value
Inhalation (vapours)	Dose level	Equivalent to OECD 403	5000 ppm	Central nervous system	Drowsiness, dizziness	6 h	Rat (male / female)	Experimental value

naphtha (petroleum), hydrotreated light

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	NOEL	Subacute toxicity test	< 500 mg/kg bw/day	Kidney	No effect	4 weeks (5 days / week)	Rat (male)	Experimental value
Dermal	NOAEL local effects	Equivalent to OECD 410	< 200 mg/kg bw/day	Skin	No effect	4 weeks (6h / day, 3 days / week)	Rabbit (male / female)	Experimental value
Inhalation (vapours)	LOAEL		4320 mg/m³ air	Central nervous system	neurotoxic effects	1 h	Human (male / female)	Experimental value
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	1402 mg/m³ air	General	No effect	107 weeks (6h / day, 5 days / week) - 109 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across
Inhalation			STOT SE cat.3		neurotoxic effects			Annex VI

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

NOVALUBE CERAMIC H1 AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

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

naphtha (petroleum), hydrotreated light

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Mouse (lymphoma L5178Y cells)	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)

NOVALUBE CERAMIC H1 AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 474		Mouse (male / female)		Experimental value

naphtha (petroleum), hydrotreated light

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

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

NOVALUBE CERAMIC H1 AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOEL	OECD 451	5000 ppm	104 weeks (6h / day, 5 days / week)	Rat (male / female)	No carcinogenic effect		Experimental value

naphtha (petroleum), hydrotreated light

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Dermal	NOAEL	Equivalent to OECD 451	0.05 ml	102 weeks (3 times / week)	Mouse (male)	No carcinogenic effect		Experimental value

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

NOVALUBE CERAMIC H1 AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	400 mg/kg bw/day	10 day(s)	Rat	No effect	Foetus	Experimental value
Maternal toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	400 mg/kg bw/day	10 day(s)	Rat (female)	No effect		Experimental value
Effects on fertility (Oral (drinking water))	NOAEL	Equivalent to OECD 415	853 mg/kg bw/day	21 day(s) - 70 day(s)	Rat (male / female)	No effect		Experimental value

naphtha (petroleum), hydrotreated light

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	23900 mg/m³ air	14 days (6h / day)	Rat	No effect	Foetus	Experimental value
Maternal toxicity	NOAEL	Equivalent to OECD 414	23900 mg/m³ air	14 day(s)	Rat	No effect		Experimental value
Effects on fertility	NOAEC (P/F1)	Equivalent to OECD 416	≥ 20000 mg/m³ air	10 weeks (6h / day, 7 days / week)	Rat (male / female)	No effect		Experimental value

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

NOVALUBE CERAMIC H1 AEROSOL

No (test)data on the mixture available

Chronic effects from short and long-term exposure

NOVALUBE CERAMIC H1 AEROSOL

No effects known.

SECTION 12: Ecological information

12.1. Toxicity

NOVALUBE CERAMIC H1 AEROSOL

No (test)data on the mixture available

Classification is based on the relevant ingredients

propan-2-ol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	9640 mg/l - 10000 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	LC50	Equivalent to OECD 202	> 10000 mg/l	24 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	Toxicity threshold		1800 mg/l	7 day(s)	Scenedesmus quadricauda	Static system	Fresh water	Experimental value; Toxicity test
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea	NOEC		2344 µmol/l	16 day(s)	Daphnia magna		Fresh water	Experimental value; Growth
Toxicity aquatic micro-organisms	Toxicity threshold	Equivalent to DIN 38412/8	1050 mg/l	16 h	Pseudomonas putida	Static system	Fresh water	Experimental value; Toxicity test
	EC50	ISO 8192	41676 mg/l	30 minutes	Activated sludge			Experimental value

calciumdihydroxide

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Toxicity algae and other aquatic plants	EC50	OECD 201	230 µg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Weight of evidence; Growth rate

naphtha (petroleum), hydrotreated light

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	10 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EL50	OECD 202	4.5 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EL50	OECD 201	3.1 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity fish	NOELR	OECD 204	2.6 mg/l	14 day(s)	Pimephales promelas	Semi-static system	Fresh water	Experimental value; Reproduction
Long-term toxicity aquatic crustacea	NOELR	OECD 211	2.6 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction

Conclusion

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

propan-2-ol

Biodegradation water

Method	Value	Duration	Value determination
OECD 301E: Modified OECD Screening Test	95 %	21 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	17.668 h	1500000 /cm³	Calculated value

naphtha (petroleum), hydrotreated light

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	77.05 %; Oxygen consumption	28 day(s)	Experimental value

Conclusion

Contains readily biodegradable component(s)

12.3. Bioaccumulative potential

NOVALUBE CERAMIC H1 AEROSOL

Log Kow

Method	Remark	Value	Temperature	Value determination

	Not applicable (mixture)			

propan-2-ol

Log Kow

Method	Remark	Value	Temperature	Value determination
		0.05	25 °C	Weight of evidence approach

naphtha (petroleum), hydrotreated light

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		12.6 - 223.87; Calculated value		Pimephales promelas	Read-across

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		2.4 - 5.7	23 °C	Experimental value
		4.66		Experimental value

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

propan-2-ol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.185 - 0.541	Calculated value

naphtha (petroleum), hydrotreated light

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	2.380	Calculated value

Conclusion

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

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

NOVALUBE CERAMIC H1 AEROSOL

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

propan-2-ol

Groundwater

Groundwater pollutant

naphtha (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.
Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).
14 06 03* (waste organic solvents, refrigerants and foam/aerosol propellants: other solvents and solvent mixtures). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Specific treatment. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).
15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1. UN number

UN number	1950

14.2. UN proper shipping name

Proper shipping name	Aerosols

14.3. Transport hazard class(es)

Hazard identification number	
Class	2
Classification code	5F

14.4. Packing group

Packing group	
Labels	2.1

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Rail (RID)

14.1. UN number

UN number	1950

14.2. UN proper shipping name

Proper shipping name	Aerosols

14.3. Transport hazard class(es)

Hazard identification number	23
Class	2
Classification code	5F

14.4. Packing group

Packing group	
Labels	2.1

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Inland waterways (ADN)

14.1. UN number

UN number	1950

14.2. UN proper shipping name

Proper shipping name	Aerosols

14.3. Transport hazard class(es)

Class	2
Classification code	5F

14.4. Packing group

Packing group	
Labels	2.1

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Sea (IMDG/IMSBC)

14.1. UN number

UN number	1950

14.2. UN proper shipping name

Proper shipping name	aerosols

14.3. Transport hazard class(es)

Class	2.1

14.4. Packing group

Packing group	
Labels	2.1

14.5. Environmental hazards

Marine pollutant	-
Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	190
Special provisions	277
Special provisions	327
Special provisions	344
Special provisions	381
Special provisions	63
Special provisions	959
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

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

Annex II of MARPOL 73/78	Not applicable

Air (ICAO-TI/IATA-DGR)

14.1. UN number

UN number	1950

14.2. UN proper shipping name

Proper shipping name	Aerosols, flammable

14.3. Transport hazard class(es)

Class	2.1

14.4. Packing group

Packing group	
Labels	2.1

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	A145
Special provisions	A167
Special provisions	A802

Passenger and cargo transport

Limited quantities: maximum net quantity per packaging	30 kg G

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
56 % - 71 %	
784 g/l - 994 g/l	

REACH Annex XVII - Restriction

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

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· propan-2-ol · naphtha (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 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. 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled H304, intended for supply to the general public. 7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'
· propan-2-ol · naphtha (petroleum), hydrotreated light	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.	1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — “whoopee” cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs. 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: “For professional users only”. 3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC. 4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

National legislation Belgium

NOVALUBE CERAMIC H1 AEROSOL

No data available

National legislation The Netherlands

NOVALUBE CERAMIC H1 AEROSOL

Waterbezwaarlijkheid	Z (1); Algemene Beoordelingsmethodiek (ABM)

National legislation France

NOVALUBE CERAMIC H1 AEROSOL

No data available

National legislation Germany

NOVALUBE CERAMIC H1 AEROSOL

WGK	3; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017

propan-2-ol

TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Propan-2-ol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

calciumdihydroxide

TA-Luft	5.2.1
TRGS900 - Risiko der Fruchtschädigung	Calciumdihydroxid; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

naphtha (petroleum), hydrotreated light

TA-Luft	5.2.5/I

National legislation United Kingdom

NOVALUBE CERAMIC H1 AEROSOL

No data available

Other relevant data

NOVALUBE CERAMIC H1 AEROSOL

No data available

propan-2-ol

IARC - classification	3; Isopropanol
TLV - Carcinogen	2-propanol; A4

naphtha (petroleum), hydrotreated light

TLV - Carcinogen	Mineral oil, pure, highly and severely refined; A4

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

SECTION 16: Other information

Full text of any H-statements referred to under heading 3:

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

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