SAFETY DATA SHEET

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

MULTI SUPER AEROSOL

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

1.1. Product identifier

Product name : MULTI SUPER 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

Lubricating oil
Anti-corrosion agent

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

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

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
🖷 +32 14 85 97 38
info@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
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.
STOT SE	category 3	H336: May cause drowsiness or dizziness.
Aquatic Chronic	category 2	H411: Toxic to aquatic life with long lasting effects.

2.2. Label elements

Contains: Kerosine (petroleum), hydrodesulfurized.

Signal word Danger

H-statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic 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.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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
Caution! Substance is absorbed through the skin

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	M-factors and ATE
Kerosine (petroleum), hydrodesulfurized 01-2119462828-25	64742-81-0 265-184-9	C≤50%	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(2)(6)(10)	Constituent	
propane 01-2119486944-21	74-98-6 200-827-9	C≤20%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant	
butane 01-2119474691-32	106-97-8 203-448-7	C≤10%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)(21)	Propellant	
propan-2-ol 01-2119457558-25	67-63-0 200-661-7	C≤5%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent	
Sulfonic acids, petroleum, sodium salts 01-2119527859-22	68608-26-4 271-781-5	C≤4%	Eye Irrit. 2; H319	(1)	Constituent	
Distillates (petroleum), solvent-dewaxed heavy paraffinic 01-2119471299-27	64742-65-0 265-169-7	C≤2%	Asp. Tox. 1; H304	(20)(1)(2)(6)(10)	Constituent	
distillates (petroleum), hydrotreated heavy paraffinic 01-2119484627-25	64742-54-7 265-157-1	C≤2%	Asp. Tox. 1; H304	(1)(2)(6)(10)	Constituent	

(1) For H- and EUH-statements in full: see section 16
(2) Substance with a Community workplace exposure limit
(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006
(20) DMSO extract < 3 %
(21) 1,3-butadiene <0.1%

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:
Dizziness. Drowsiness.

After skin contact:
Tingling/irritation of the skin.

After eye contact:
No effects known.

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: Water, Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting CO2 extinguisher.

Major fire: Quantities of water.

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.

5.3.2 Special protective equipment for fire-fighters:
Gloves (EN 374). Protective goggles (EN 166). Head/neck protection. Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. 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 goggles (EN 166). Head/neck protection. 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.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. 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

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. Meet the legal requirements. Store in a cool area. Keep container in a well-ventilated place. Fireproof storeroom. Keep out of direct sunlight.

7.2.2 Keep away from:
Heat sources, ignition sources.

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.

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
Butane, tous isomères: n-butane	Short time value	980 ppm
	Short time value	2370 mg/m³
Carburant pour les moteurs à réaction (en vapeur d'hydrocarbure total) : application limitée aux conditions d'exposition aux aérosols négligeable	Time-weighted average exposure limit 8 h	200 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

The Netherlands

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
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 **(1)**
	Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m³ **(1)**
Petroleumsulfonate, Natrium-Salze	*vgl. Abschn. IIb*	
Propan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm **(1)**
	Time-weighted average exposure limit 8 h (TRGS 900)	1800 mg/m³ **(1)**
Propan-2-ol	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm **(2)**
	Time-weighted average exposure limit 8 h (TRGS 900)	500 mg/m³ **(2)**

(1) UF: 4 (II)
(2) UF: 2 (II)

Austria

2-Propanol Kurzzeitwert für Großguss	**) Kurzzeitwert für Großguss gilt bis 31.12.2013*	
	Tagesmittelwert (MAK)	200 ppm
	Tagesmittelwert (MAK)	500 mg/m³
	Kurzzeitwert 30(Miw) 4x (MAK)	800 ppm
	Kurzzeitwert 30(Miw) 4x (MAK)	2000 mg/m³
2-Propanol	Tagesmittelwert (MAK)	200 ppm
	Tagesmittelwert (MAK)	500 mg/m³
	Kurzzeitwert 15(Miw) 4x (MAK)	800 ppm
	Kurzzeitwert 15(Miw) 4x (MAK)	2000 mg/m³
Butan (beide Isomeren): n-Butan (R 600) Isobutan (R 600a)	Tagesmittelwert (MAK)	800 ppm
	Tagesmittelwert (MAK)	1900 mg/m³
	Kurzzeitwert 60(Mow) 3x (MAK)	1600 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	3800 mg/m³
Propan (R 290)	Tagesmittelwert (MAK)	1000 ppm
	Tagesmittelwert (MAK)	1800 mg/m³
	Kurzzeitwert 60(Mow) 3x (MAK)	2000 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	3600 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
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

Ireland

Aliphatic hydrocarbon gases Alkanes (C1-C3): Propane	*Asphx.*	
Butane, all isomers	Short time value (Advisory occupational exposure limit values)	1000 ppm
Isopropyl alcohol	Time-weighted average exposure limit 8 h (Advisory occupational exposure limit values)	200 ppm
	Short time value (Advisory occupational exposure limit values)	400 ppm

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, isomers	Short time value (TLV - Adopted Value)	1000 ppm
	Explosion hazard	
Kerosene/Jet fuels, as total hydrocarbon vapor	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	200 mg/m³ **(1)**
Mineral oil, excluding metal working fluids: Poorly and mildly refined	*Exposure by all routes should be carefully controlled to levels as low as possible*	
Mineral oil, excluding metal working fluids: Pure, highly and severely refined	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	5 mg/m³ **(2)**
Propane	*See Appendix F: Minimal Oxygen Content; Simple asphyxiant, Explosion hazard*	

(1) (P): Application restricted to conditions in which there are negligible aerosol exposures
(2) (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	
Propan-2-ol (Aceton)	Vollblut: expositionsende, bzw. schichtende	25 mg/l	

USA (BEI-ACGIH)

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

8.1.2 Sampling methods

Product name	Test	Number
Isopropanol (Volatile Organic compounds)	NIOSH	2549
Isopropyl Alcohol (Alcohols I)	NIOSH	1400
Isopropyl Alcohol	NIOSH	3900
Isopropyl Alcohol	OSHA	5001
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

Kerosine (petroleum), hydrodesulfurized

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	50 mg/m³	
	Acute local effects inhalation	250 g/m³	
	Long-term systemic effects dermal	7.7 mg/kg bw/day	

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	

Sulfonic acids, petroleum, sodium salts

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.66 mg/m³	
	Long-term systemic effects dermal	3.33 mg/kg bw/day	

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	2.73 mg/m³	
	Long-term local effects inhalation	5.58 mg/m³	
	Long-term systemic effects dermal	0.97 mg/kg bw/day	

distillates (petroleum), hydrotreated heavy paraffinic

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	2.73 mg/m³	
	Long-term local effects inhalation	5.58 mg/m³	
	Long-term systemic effects dermal	0.97 mg/kg bw/day	

DNEL/DMEL - General population

Kerosine (petroleum), hydrodesulfurized

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	10.66 mg/m³	
	Long-term systemic effects dermal	1.64 mg/kg bw/day	
	Long-term systemic effects oral	5 mg/m³	

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	

Sulfonic acids, petroleum, sodium salts

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.33 mg/m³	
	Long-term systemic effects dermal	1.667 mg/kg bw/day	
	Long-term systemic effects oral	0.833 mg/kg bw/day	

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects oral	0.74 mg/kg bw/day	

distillates (petroleum), hydrotreated heavy paraffinic

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects oral	0.74 mg/kg bw/day	

PNEC

Sulfonic acids, petroleum, sodium salts

Compartments	Value	Remark
Fresh water	1 mg/l	
Marine water	1 mg/l	
Fresh water (intermittent releases)	10 mg/l	
STP	100 mg/l	
Fresh water sediment	723500000 mg/kg sediment dw	
Marine water sediment	723500000 mg/kg sediment dw	
Soil	868700000 mg/kg soil dw	
Oral	16.667 mg/kg food	

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Compartments	Value	Remark
Oral	9.33 mg/kg food	

distillates (petroleum), hydrotreated heavy paraffinic

Compartments	Value	Remark
Oral	9.33 mg/kg food	

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

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	Thickness	Protection index	Remark
nitrile rubber	> 480 minutes	0.35 mm	Class 6	

c) Eye protection:

Protective goggles (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034). Head/neck protection.

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	Aerosol
Colour	No data available on colour
Odour	Characteristic odour
Odour threshold	No data available in the literature
Melting point	Not applicable (aerosol)
Boiling point	No data available in the literature
Flammability	Extremely flammable aerosol.
Explosion limits	0.7 - 6.0 vol %
Flash point	Not applicable (aerosol)
Auto-ignition temperature	Not applicable (aerosol)
Decomposition temperature	No data available in the literature
pH	Not applicable (aerosol)
Kinematic viscosity	Not applicable (aerosol)
Dynamic viscosity	Not applicable (aerosol)
Solubility	Water ; insoluble
Log Kow	Not applicable (mixture)
Vapour pressure	No data available in the literature
Absolute density	800 kg/m³ ; 20 °C ; Liquid
Relative density	0.80 ; 20 °C ; Liquid
Relative vapour density	No data available in the literature
Particle size	Not applicable (aerosol)

9.2. Other information

Evaporation rate	0.04 ; Butyl acetate

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

Stable under normal conditions.

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

No data available.

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

MULTI SUPER AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Kerosine (petroleum), hydrodesulfurized

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 420	> 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	> 5.28 mg/l air	4 h	Rat (male / female)	Read-across	

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 ml/kg bw	24 h	Rabbit	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 10000 ppm	6 h	Rat (male / female)	Experimental value	

Sulfonic acids, petroleum, sodium salts

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 5000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 5000 mg/kg bw	24 h	Rabbit (male / female)	Experimental value	
Inhalation (aerosol)	LC50	OECD 403	> 1.9 mg/l	4 h	Rat (male / female)	Read-across	

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 5000 mg/kg bw		Rat (male / female)	Read-across	
Dermal	LD50	OECD 402	> 5000 mg/kg bw	24 h	Rabbit (male / female)	Read-across	
Inhalation (aerosol)	LC50	OECD 403	> 5.53 mg/l air	4 h	Rat (male / female)	Read-across	

distillates (petroleum), hydrotreated heavy paraffinic

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 5000 mg/kg bw		Rat (male / female)	Read-across	
Dermal	LD50	OECD 402	> 5000 mg/kg bw	24 h	Rabbit (male / female)	Read-across	
Inhalation (aerosol)	LC50	OECD 403	> 5.53 mg/l air	4 h	Rat (male / female)	Read-across	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

MULTI SUPER AEROSOL

No (test)data on the mixture available

Classification is based on the relevant ingredients

Kerosine (petroleum), hydrodesulfurized

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	EPA OTS 798.4500			Rabbit	Read-across	Single treatment
Skin	Irritating	US EPA	24 h	24; 48; 72 hours	Rabbit	Read-across	

propan-2-ol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	Equivalent to OECD 405		1; 2; 3; 4; 7; 10; 14 days	Rabbit	Experimental value	Single treatment without rinsing
Skin	Not irritating		4 h	4; 24; 48; 72 hours	Rabbit	Experimental value	

Sulfonic acids, petroleum, sodium salts

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating; category 2					Expert judgement	
Eye	Not irritating	EPA OPPTS 870.2400		24; 48; 72 hours	Rabbit	Experimental value	Single treatment without rinsing
Skin	Not irritating	EPA OPPTS 870.2500	4 h	24; 48; 72 hours	Rabbit	Experimental value	

Distillates (petroleum), solvent-dewaxed heavy paraffinic

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

distillates (petroleum), hydrotreated heavy paraffinic

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

Conclusion

Causes skin irritation.
Not classified as irritating to the eyes
Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

MULTI SUPER AEROSOL

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

Kerosine (petroleum), hydrodesulfurized

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

propan-2-ol

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

Sulfonic acids, petroleum, sodium salts

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Patch test on human skin			Human (male / female)	Experimental value	

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406			Guinea pig (male)	Read-across	
Skin	Not sensitizing	Human observation			Human (male / female)	Experimental value	

distillates (petroleum), hydrotreated heavy paraffinic

Route of exposure	Result	Method	Exposure time	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

MULTI SUPER AEROSOL

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

Kerosine (petroleum), hydrodesulfurized

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	Equivalent to OECD 408	750 mg/kg bw/day	No effect	21 week(s)	Rat (female)	Read-across	
Dermal	NOAEL	Equivalent to OECD 411	≥ 495 mg/kg bw/day	No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across	
Inhalation (vapours)	NOAEL	Equivalent to OECD 413	> 1000 mg/m³ air	No effect	90 days (continuous)	Rat (female)	Read-across	
Inhalation			STOT SE cat.3	Drowsiness, dizziness			Literature study	

propan-2-ol

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral							Data waiving	
Dermal							Data waiving	
Inhalation (vapours)	NOAEC	OECD 451	5000 ppm	No adverse systemic effects	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	

Sulfonic acids, petroleum, sodium salts

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	OECD 407	500 mg/kg bw/day	No effect	4 weeks (daily)	Rat (male / female)	Experimental value	
Dermal	NOAEL	OECD 410	> 1000 mg/kg bw/day	No effect	28 days (6h / day)	Rat (male / female)	Read-across	
Inhalation (aerosol)	NOAEL	OECD 412	49.5 mg/m³ air	No effect	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across	

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	LOAEL	Equivalent to OECD 408	125 mg/kg bw/day	General (overall effects)	13 weeks (5 days / week)	Rat (male)	Read-across	
Dermal	NOAEL	OECD 410	1000 mg/kg bw/day	No adverse systemic effects	28 weeks (6h / day, 3 days / week)	Rabbit (male / female)	Read-across	
Inhalation	NOAEC	Equivalent to OECD 412	> 960 mg/l	No effect	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across	

distillates (petroleum), hydrotreated heavy paraffinic

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	LOAEL	Equivalent to OECD 408	125 mg/kg bw/day	Overall effects	13 weeks (5 days / week)	Rat (male)	Read-across	
Dermal	NOAEL systemic effects	OECD 410	1000 mg/kg bw/day	No adverse systemic effects	4 weeks (6h / day, 3 days / week)	Rabbit (male / female)	Read-across	
Inhalation (aerosol)	NOEC	Equivalent to OECD 412	220 mg/m³ air	Lungs (no effect)	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across	
Inhalation (aerosol)	NOAEC systemic effects	Equivalent to OECD 412	> 980 mg/m³ air	No adverse systemic effects	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across	

Conclusion

May cause drowsiness or dizziness.
Not classified for subchronic toxicity

Mutagenicity (in vitro)

MULTI SUPER AEROSOL

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

Kerosine (petroleum), hydrodesulfurized

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Read-across	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Read-across	

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	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Chinese hamster ovary (CHO)	No effect	Experimental value	

Sulfonic acids, petroleum, sodium salts

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S. typhimurium and E. coli)	No effect	Read-across	
Negative with metabolic activation, negative without metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Read-across	

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Result	Method	Test substrate	Effect	Value determination	Remark
Positive with metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)		Read-across	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)		Read-across	

distillates (petroleum), hydrotreated heavy paraffinic

Result	Method	Test substrate	Effect	Value determination	Remark
Positive with metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)		Read-across	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)		Read-across	

Mutagenicity (in vivo)

MULTI SUPER AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Kerosine (petroleum), hydrodesulfurized

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Positive (Intraperitoneal)	Equivalent to OECD 479		Mouse (male)	Affection of the bone marrow	Read-across	Single intraperitoneal injection
Negative (Intraperitoneal)	Equivalent to OECD 479		Mouse (female)	No effect	Read-across	Single intraperitoneal injection

propan-2-ol

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Intraperitoneal)	Equivalent to OECD 474		Mouse (male / female)	No effect	Experimental value	Single intraperitoneal injection

Sulfonic acids, petroleum, sodium salts

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

Distillates (petroleum), solvent-dewaxed heavy paraffinic

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

distillates (petroleum), hydrotreated heavy paraffinic

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

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

MULTI SUPER AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Kerosine (petroleum), hydrodesulfurized

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Dermal		Equivalent to OECD 451		Skin (tumor formation)	104 week(s)	Mouse (male)	Read-across	

propan-2-ol

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

Sulfonic acids, petroleum, sodium salts

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

distillates (petroleum), hydrotreated heavy paraffinic

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Dermal		Equivalent to OECD 451		No carcinogenic effect	78 week(s)	Mouse (female)	Read-across	

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

MULTI SUPER AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Kerosine (petroleum), hydrodesulfurized

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	1000 mg/kg bw/day	10 day(s)	Rat	Foetus (no effect)	Read-across	
Developmental toxicity (Oral (stomach tube))	LOAEL	OECD 414	1500 mg/kg bw/day	10 day(s)	Rat	Foetus (reduced fetal bodyweights)	Read-across	
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	500 mg/kg bw/day	10 day(s)	Rat	No effect	Read-across	
Maternal toxicity (Oral (stomach tube))	LOAEL	OECD 414	1000 mg/kg bw/day	10 day(s)	Rat	Maternal toxicity	Read-across	
Effects on fertility (Oral (stomach tube))	NOAEL	Equivalent to OECD 415	≥ 1500 mg/kg bw/day	21 week(s)	Rat (female)	No effect	Read-across	
Effects on fertility (Oral (stomach tube))	NOAEL	Equivalent to OECD 415	≥ 3000 mg/kg bw/day	10 week(s) - 13 week(s)	Rat (male)	No effect	Read-across	

propan-2-ol

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

Sulfonic acids, petroleum, sodium salts

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity							Data waiving	
Maternal toxicity							Data waiving	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 415	> 500 mg/kg bw/day		Rat (male / female)	No effect	Experimental value	

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Dermal)	NOAEL	Equivalent to OECD 414	30 mg/kg bw/day	20 days (gestation, daily)	Rat	No effect	Read-across	
Developmental toxicity (Dermal)	LOAEL	Equivalent to OECD 414	125 mg/kg bw/day	20 days (gestation, daily)	Rat	Embryotoxicity and fetotoxicity	Read-across	
Maternal toxicity (Dermal)	NOAEL	Equivalent to OECD 414	30 mg/kg bw/day	20 days (gestation, daily)	Rat	No effect	Read-across	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 421	≥ 1000 mg/kg bw/day		Rat (male / female)	No effect	Read-across	

distillates (petroleum), hydrotreated heavy paraffinic

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Dermal)	NOAEL	Equivalent to OECD 414	30 mg/kg bw/day	20 days (gestation, daily)	Rat	No effect	Read-across	
Developmental toxicity (Dermal)	LOAEL	Equivalent to OECD 414	125 mg/kg bw/day	20 days (gestation, daily)	Rat	Embryotoxicity and fetotoxicity	Read-across	
Maternal toxicity (Dermal)	NOAEL	Equivalent to OECD 414	30 mg/kg bw/day	20 days (gestation, daily)	Rat	No effect	Read-across	
Maternal toxicity (Dermal)	LOAEL	Equivalent to OECD 414	125 mg/kg bw/day	20 days (gestation, daily)	Rat	Maternal toxicity	Read-across	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 421	≥ 1000 mg/kg bw/day		Rat (male / female)	No effect	Read-across	

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

MULTI SUPER AEROSOL

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

Toxicity other effects

MULTI SUPER AEROSOL

No (test)data on the mixture available

Chronic effects from short and long-term exposure

MULTI SUPER AEROSOL

No effects known.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

MULTI SUPER AEROSOL

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

Kerosine (petroleum), hydrodesulfurized

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	2 mg/l - 5 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EL50	OECD 202	1.4 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EL50	OECD 201	1 mg/l - 3 mg/l	72 h	Selenastrum capricornutum	Static system	Fresh water	Experimental value; Cell numbers
Long-term toxicity aquatic crustacea	NOEL	Equivalent to OECD 211	0.48 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction

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	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	NOELR	Petrotox computer model	> 1000 mg/l	28 day(s)	Brachydanio rerio			Estimated value
Long-term toxicity aquatic crustacea	NOEC		141 mg/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

Sulfonic acids, petroleum, sodium salts

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	> 10000 mg/l WAF	96 h	Cyprinodon variegatus	Static renewal	Salt water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	EPA OTS 797.1300	> 1000 mg/l WAF	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	ErC50	EPA OTS 797.1050	> 1000 mg/l WAF	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
	NOEC	EPA OTS 797.1050	1000 mg/l WAF	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate

Distillates (petroleum), solvent-dewaxed heavy paraffinic

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	> 100 mg/l	96 h	Pimephales promelas	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EL50	Equivalent to OECD 202	> 10000 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	NOEL	OECD 201	> 100 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOELR		≥ 1000 mg/l	14 day(s)	Oncorhynchus mykiss		Fresh water	QSAR; Nominal concentration
Long-term toxicity aquatic crustacea	NOEL	OECD 211	10 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP

distillates (petroleum), hydrotreated heavy paraffinic

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	> 100 mg/l	96 h	Pimephales promelas	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EL50	Equivalent to OECD 202	> 10000 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	NOEL	OECD 201	≥ 100 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOELR		≥ 1000 mg/l	14 day(s)	Oncorhynchus mykiss		Fresh water	QSAR; Nominal concentration
Long-term toxicity aquatic crustacea	NOEL	OECD 211	10 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP

Conclusion

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Kerosine (petroleum), hydrodesulfurized

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	58.6 %	28 day(s)	Experimental value

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Biodegradation water

Method	Value	Duration	Value determination
EU Method C.5	53 %; Oxygen consumption	5 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	17.668 h	1.5E6 /cm³	Calculated value

Sulfonic acids, petroleum, sodium salts

Biodegradation water

Method	Value	Duration	Value determination
OECD 301D	8 %; GLP	28 day(s)	Experimental value

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	31 %; Oxygen consumption	28 day(s)	Experimental value

distillates (petroleum), hydrotreated heavy paraffinic

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	31 %; Oxygen consumption	28 day(s)	Experimental value

Conclusion

Water

The surfactant(s) is/are biodegradable according to Regulation (EC) No 648/2004

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

MULTI SUPER AEROSOL

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

Kerosine (petroleum), hydrodesulfurized

Log Kow

Method	Remark	Value	Temperature	Value determination
		6.10		Experimental value

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BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.01	1015			Estimated value

Log Kow

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

Sulfonic acids, petroleum, sodium salts

Log Kow

Method	Remark	Value	Temperature	Value determination
		22	25 °C	Weight of evidence approach

Distillates (petroleum), solvent-dewaxed heavy paraffinic

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.01	5147 l/kg; Fresh weight			Estimated value

distillates (petroleum), hydrotreated heavy paraffinic

Log Kow

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

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

Kerosine (petroleum), hydrodesulfurized

Percent distribution

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

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(log) Koc

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

Sulfonic acids, petroleum, sodium salts

(log) Koc

Parameter	Method	Value	Value determination
Koc		8.3E9	QSAR
log Koc		8.9	Calculated value

Distillates (petroleum), solvent-dewaxed heavy paraffinic

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	5.3 - 5.8	Calculated value

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

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

MULTI SUPER AEROSOL

Greenhouse gases

Contains component(s) included in the list of substances which may contribute to the greenhouse effect (IPCC)
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)

Kerosine (petroleum), hydrodesulfurized

Greenhouse gases

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

Groundwater

Groundwater pollutant

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Greenhouse gases

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

Groundwater

Groundwater pollutant

Sulfonic acids, petroleum, sodium salts

Greenhouse gases

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

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Greenhouse gases

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

Groundwater

Groundwater pollutant

distillates (petroleum), hydrotreated heavy paraffinic

Greenhouse gases

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

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).
16 05 04* (gases in pressure containers and discarded chemicals: gases in pressure containers (including halons) containing hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Specific treatment. 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 or ID 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	yes

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 or ID 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	yes

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 or ID number

UN number/ID 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	yes

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 or ID 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	P
Environmentally hazardous substance mark	yes

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. Maritime transport in bulk according to IMO instruments

Annex II of MARPOL 73/78	Not applicable

Air (ICAO-TI/IATA-DGR)

14.1. UN number or ID number

UN number/ID 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	yes

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
80 %	
587.2 g/l	

Directive 2012/18/EU (Seveso III)

Threshold values under normal circumstances

Substance or category	Low tier (tonnes)	Top tier (tonnes)	Group	For this substance or mixture the summation rule has to be applied for:
P3b FLAMMABLE AEROSOLS	5000 (net)	50000 (net)	None	Flammability
E2 Hazardous to the Aquatic Environment in Category Chronic 2	200	500	None	Eco-toxicity

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
· Kerosine (petroleum), hydrodesulfurized · propan-2-ol · Distillates (petroleum), solvent-dewaxed heavy paraffinic · distillates (petroleum), hydrotreated heavy paraffinic	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.
· Kerosine (petroleum), hydrodesulfurized · propan-2-ol	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.

· propan-2-ol · Distillates (petroleum), solvent-dewaxed heavy paraffinic	Substances falling within one or more of the following points: (a) substances classified as any of the following in Part 3 of Annex VI to Regulation (EC) No 1272/2008: — carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, but excluding any such substances classified due to effects only following exposure by inhalation — reproductive toxicant category 1A, 1B or 2 but excluding any such substances classified due to effects only following exposure by inhalation — skin sensitiser category 1, 1A or 1B — skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2 — serious eye damage category 1 or eye irritant category 2 (b) substances listed in Annex II to Regulation (EC) No 1223/2009 of the European Parliament and of the Council (c) substances listed in Annex IV to Regulation (EC) No 1223/2009 for which a condition is specified in at least one of the columns g, h and i of the table in that Annex (d) substances listed in Appendix 13 to this Annex. The ancillary requirements in paragraphs 7 and 8 of column 2 of this entry apply to all mixtures for use for tattooing purposes, whether or not they contain a substance falling within points (a) to (d) of this column of this entry.	Mixtures for tattooing purposes are subject to the restrictions of Regulation (EU) 2020/2081

National legislation Belgium

MULTI SUPER AEROSOL

No data available

Kerosine (petroleum), hydrodesulfurized

Résorption peau	Carburant pour les moteurs à réaction (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.

propan-2-ol

Agents cancérigènes, mutagènes et reprotoxiques et aux agents possédant des propriétés perturbant le système endocrinien (Code du bien-être au travail, Livre VI, titre 2)	alcool isopropylique; VI.2.2.; Liste des procédés au cours desquels une substance ou un mélange se dégage; Procédé à l'acide fort dans la fabrication d'alcool isopropylique.

National legislation The Netherlands

MULTI SUPER AEROSOL

Waterbezwaarlijkheid	A (2); Algemene Beoordelingsmethodiek (ABM)

Distillates (petroleum), solvent-dewaxed heavy paraffinic

SZW - Lijst van kankerverwekkende stoffen	(complexe) aardolie- en steenkoolderivaten; Opgenomen in SZW-lijst van kankerverwekkende stoffen
SZW - Lijst van mutagene stoffen	aardoliegassen en residuen; Opgenomen in SZW-lijst van mutagene stoffen

distillates (petroleum), hydrotreated heavy paraffinic

SZW - Lijst van mutagene stoffen	aardoliegassen en residuen; Opgenomen in SZW-lijst van mutagene stoffen

National legislation France

MULTI SUPER AEROSOL

No data available

National legislation Germany

MULTI SUPER AEROSOL

Lagerklasse (TRGS510)	2B: Aerosolpackungen und Feuerzeuge
WGK	1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017

Kerosine (petroleum), hydrodesulfurized

TA-Luft	5.2.5/I

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

Sulfonic acids, petroleum, sodium salts

TA-Luft	5.2.1

Distillates (petroleum), solvent-dewaxed heavy paraffinic

TA-Luft	5.2.5/I

National legislation Austria

MULTI SUPER AEROSOL

No data available

National legislation United Kingdom

MULTI SUPER AEROSOL

No data available

National legislation Ireland

MULTI SUPER AEROSOL

No data available

propan-2-ol

Skin resorption	Isopropyl alcohol; Skin

Other relevant data

MULTI SUPER AEROSOL

No data available

Kerosine (petroleum), hydrodesulfurized

TLV - Carcinogen	Kerosene/Jet fuels, as total hydrocarbon vapor; A3
TLV - Skin absorption	Kerosene/Jet fuels, as total hydrocarbon vapor; Skin; Danger of cutaneous absorption

propan-2-ol

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

Distillates (petroleum), solvent-dewaxed heavy paraffinic

TLV - Carcinogen	Mineral oil, excluding metal working fluids: Poorly and mildly refined; A2

distillates (petroleum), hydrotreated heavy paraffinic

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:

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H226 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.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
GLP	Good Laboratory Practice
LC0	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.