

SAFETY DATA SHEET

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

TRIMFIX

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

1.1. Product identifier

Product name : TRIMFIX
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

Adhesive

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: hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane; pentane; butanone; isopentane.

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.

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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

May build up electrostatic charges: risk of ignition
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 List No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane 01-2119475514-35	921-024-6	25% ≤C<50%	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(2)(10)	Constituent	
dimethyl ether 01-2119472128-37	115-10-6 204-065-8	12.5% ≤C<20%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant	
propane 01-2119486944-21	74-98-6 200-827-9	5%≤C<10%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant	
pentane 01-2119459286-30	109-66-0 203-692-4	5%≤C<10%	Flam. Liq. 2; H225 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH066	(1)(2)(10)	Constituent	
butanone 01-2119457290-43	78-93-3 201-159-0	5%≤C<10%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	(1)(2)(10)	Constituent	
butane 01-2119474691-32	106-97-8 203-448-7	2.5%≤C<5%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)(21)	Propellant	
isobutane 01-2119485395-27	75-28-5 200-857-2	2.5%≤C<5%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)(21)	Propellant	
isopentane 01-2119475602-38	78-78-4 201-142-8	C<2.5%	Flam. Liq. 1; H224 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH066	(1)(2)(10)	Constituent	
Resin acids and Rosin acids, potassium salts 01-2119486885-17	61790-50-9 263-142-4	C<2.5%	Eye Irrit. 2; H319	(1)	Constituent	

(1) For H- and EUH-statements in full: see section 16
(2) Substance with a Community workplace exposure limit
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006
(21) 1,3-butadiene <0.1%
Note: numbers 9xx-xxx-x are provisional list numbers assigned by Echa pending an official EC inventory number

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

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

After inhalation:

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:

Reason for revision: 2; 3; 4; 5; 6; 8; 11; 12; 15

Publication date: 2000-10-04

Date of revision: 2025-05-20

Revision number: 1000

BIG number: 32986

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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. ON CONTINUOUS EXPOSURE/CONTACT: Dry skin. Cracking 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: persistent 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. Remove contaminated clothing immediately.

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7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

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

7.2.2 Keep away from:

Heat sources, ignition sources, (strong) acids.

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

Butanone	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	200 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	600 mg/m ³
	Short time value (Indicative occupational exposure limit value)	300 ppm
	Short time value (Indicative occupational exposure limit value)	900 mg/m ³
Dimethylether	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1000 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1920 mg/m ³
Isopentane	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1000 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	3000 mg/m ³
Pentane	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1000 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	3000 mg/m ³

Belgium

2-Butanone	Time-weighted average exposure limit 8 h	200 ppm
	Time-weighted average exposure limit 8 h	600 mg/m ³
	Short time value	300 ppm
	Short time value	900 mg/m ³
Butane, tous isomères: iso-butane	Short time value	980 ppm
	Short time value	2370 mg/m ³
Butane, tous isomères: n-butane	Short time value	980 ppm
	Short time value	2370 mg/m ³
Hydrocarbures aliphatiques sous forme gazeuse: (Alcanes C1-C3)	Time-weighted average exposure limit 8 h	1000 ppm
Oxyde de diméthyle	Time-weighted average exposure limit 8 h	1000 ppm
	Time-weighted average exposure limit 8 h	1920 mg/m ³
Pentane, tous isomères	Time-weighted average exposure limit 8 h	600 ppm
	Time-weighted average exposure limit 8 h	1800 mg/m ³
	Short time value	750 ppm
	Short time value	2250 mg/m ³

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The Netherlands

2-Butanon	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	197 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	590 mg/m ³
	Short time value (Public occupational exposure limit value)	300 ppm
	Short time value (Public occupational exposure limit value)	900 mg/m ³
Dimethylether	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	495 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	950 mg/m ³
	Short time value (Public occupational exposure limit value)	781 ppm
	Short time value (Public occupational exposure limit value)	1500 mg/m ³
Isopentaaan	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	600 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1800 mg/m ³
n-Pentaaan	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	600 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1800 mg/m ³

France

Hydrocarbures en C6-C12 (ensemble des)	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1000 mg/m ³ (1)
	Short time value (VL: Valeur non réglementaire indicative)	1500 mg/m ³ (1)
	<i>Les valeurs spécifiques fixées pour les hydrocarbures nommément désignés dans la liste restent valable simultanément. Une valeur d'objectif de 500 mg/m³ avait été prévue par la circulaire du 12 juillet 1993, elle devait être réexaminée en 1995 mais ne l'a pas été.</i>	
Isopentane	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	1000 ppm
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	3000 mg/m ³
Méthyléthylcétone	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	200 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	600 mg/m ³
	Short time value (VRC: Valeur réglementaire contraignante)	300 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	900 mg/m ³
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/m ³
n-Pentane	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	1000 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	3000 mg/m ³
Oxyde de diméthyle	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	1000 ppm
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	1920 mg/m ³

(1) vapeurs

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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/m ³ (1)
Butanon	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm (2)
	Time-weighted average exposure limit 8 h (TRGS 900)	600 mg/m ³ (2)
Dimethylether	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm (3)
	Time-weighted average exposure limit 8 h (TRGS 900)	1900 mg/m ³ (3)
Isobutan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm (1)
	Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m ³ (1)
Kohlenwasserstoffgemische, Verwendung als Lösemittel (Lösemittelkohlenwasserstoffe), additiv-frei: C6-C8 Aliphaten	Time-weighted average exposure limit 8 h (TRGS 900)	700 mg/m ³ (4)
Methylbutan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm (5)
	Time-weighted average exposure limit 8 h (TRGS 900)	3000 mg/m ³ (5)
Pentan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm (5)
	Time-weighted average exposure limit 8 h (TRGS 900)	3000 mg/m ³ (5)
Propan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm (1)
	Time-weighted average exposure limit 8 h (TRGS 900)	1800 mg/m ³ (1)

(1) UF: 4 (II)

(2) UF: 1 (I)

(3) UF: 8 (II)

(4) Vgl. Nummer 2.9 Anwendung und Geltungsbereich der Arbeitsplatzgrenzwerte für Kohlenwasserstoffgemische; UF: 2 (II)

(5) UF: 2 (II)

Austria

Butan (beide Isomeren): n-Butan (R 600) Isobutan (R 600a)	Tagesmittelwert (MAK)	800 ppm
	Tagesmittelwert (MAK)	1900 mg/m ³
	Kurzzeitwert 60(Mow) 3x (MAK)	1600 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	3800 mg/m ³
Butanon	Tagesmittelwert (MAK)	100 ppm
	Tagesmittelwert (MAK)	295 mg/m ³
	Kurzzeitwert 30(Miw) 4x (MAK)	200 ppm
	Kurzzeitwert 30(Miw) 4x (MAK)	590 mg/m ³
Dimethylether	Tagesmittelwert (MAK)	1000 ppm
	Tagesmittelwert (MAK)	1910 mg/m ³
	Kurzzeitwert 60(Mow) 3x (MAK)	2000 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	3820 mg/m ³
Pentan (alle Isomeren): n-Pentan Isopentan tert-Pentan	Tagesmittelwert (MAK)	600 ppm
	Tagesmittelwert (MAK)	1800 mg/m ³
	Kurzzeitwert 60(Mow) 3x (MAK)	1200 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	3600 mg/m ³
Propan (R 290)	Tagesmittelwert (MAK)	1000 ppm
	Tagesmittelwert (MAK)	1800 mg/m ³
	Kurzzeitwert 60(Mow) 3x (MAK)	2000 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	3600 mg/m ³

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UK

Butan-2-one (methyl ethyl ketone)	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	200 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	600 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	300 ppm
	Short time value (Workplace exposure limit (EH40/2005))	899 mg/m ³
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/m ³
	Short time value (Workplace exposure limit (EH40/2005))	750 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1810 mg/m ³
Dimethyl ether	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))	766 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	958 mg/m ³
Isopentane	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))	1800 mg/m ³
Pentane	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))	1800 mg/m ³

Ireland

Aliphatic hydrocarbon gases Alkanes (C1-C3): Propane	<i>Asphx.</i>	
Butane, all isomers	Short time value (Advisory occupational exposure limit values)	1000 ppm
Dimethyl ether	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	1000 ppm
	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	1920 mg/m ³
iso-Pentane	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	1000 ppm
	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	3000 mg/m ³
Methyl ethyl ketone	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	200 ppm
	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	600 mg/m ³
	Short time value (Binding occupational exposure limit values)	300 ppm
	Short time value (Binding occupational exposure limit values)	900 mg/m ³
Pentane	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	1000 ppm
	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	3000 mg/m ³

Italy

Butanone	Time-weighted average exposure limit 8 h (XXXVIII)	200 ppm
	Time-weighted average exposure limit 8 h (XXXVIII)	600 mg/m ³
	Short time value (XXXVIII)	300 ppm
	Short time value (XXXVIII)	900 mg/m ³
Etere dimetilico	Time-weighted average exposure limit 8 h (XXXVIII)	1000 ppm
	Time-weighted average exposure limit 8 h (XXXVIII)	1920 mg/m ³
Isopentano	Time-weighted average exposure limit 8 h (XXXVIII)	667 ppm
	Time-weighted average exposure limit 8 h (XXXVIII)	2000 mg/m ³
Pentano	Time-weighted average exposure limit 8 h (XXXVIII)	667 ppm
	Time-weighted average exposure limit 8 h (XXXVIII)	2000 mg/m ³

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USA (TLV-ACGIH)

Butane, isomers	Short time value (TLV - Adopted Value)	1000 ppm
	Explosion hazard	
Dimethyl Ether	Time-weighted average exposure limit 8 h (WEEL)	1000 ppm
Methyl ethyl ketone	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	75 ppm
	Short time value (TLV - Adopted Value)	150 ppm
Pentane, all isomers	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1000 ppm
Propane	See Appendix F: Minimal Oxygen Content; Simple asphyxiant, Explosion hazard	

b) National biological limit values

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

Germany

2-Butanon (Methylethylketon) (2-Butanon)	Urin: expositionsende, bzw. schichtende	2 mg/l	
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UK

Butan-2-one (butan-2-one)	Urine: post shift	70 µmol/L	
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USA (BEI-ACGIH)

Methyl ethyl ketone (Methyl ethyl ketone)	Urine: end of shift	2 mg/L	Nonspecific
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8.1.2 Sampling methods

Product name	Test	Number
2-Butanone (MEK) (Methyl ethyl ketone)	NIOSH	2500
2-Butanone (organic and inorganic gases by Extractive FTIR)	NIOSH	3800
2-Butanone (Volatile Organic compounds)	NIOSH	2549
2-Butanone	NIOSH	2027
2-Butanone	OSHA	1004
MEK	NIOSH	8002
Methyl Ethyl Ketone (ketones I)	NIOSH	2555
Methyl Ethyl Ketone	NIOSH	8319
N-PENTANE (HYDROCARBONS, BP 36 TO 126 °C)	NIOSH	1500
n-Pentane (Volatile Organic compounds)	NIOSH	2549

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

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	2035 mg/m³	
	Long-term systemic effects dermal	773 mg/kg bw/day	

pentane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	3000 mg/m³	
	Long-term systemic effects dermal	432 mg/kg bw/day	

butanone

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	600 mg/m³	
	Acute systemic effects inhalation	900 mg/m³	
	Long-term systemic effects dermal	1161 mg/kg bw/day	

isopentane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	3000 mg/m³	
	Long-term systemic effects dermal	432 mg/kg bw/day	

DNEL/DMEL - General population

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	608 mg/m³	
	Long-term systemic effects dermal	699 mg/kg bw/day	
	Long-term systemic effects oral	699 mg/kg bw/day	

pentane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	643 mg/m³	
	Long-term systemic effects dermal	214 mg/kg bw/day	
	Long-term systemic effects oral	214 mg/kg bw/day	

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butanone

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	106 mg/m ³	
	Acute systemic effects inhalation	450 mg/m ³	
	Long-term systemic effects dermal	412 mg/kg bw/day	
	Long-term systemic effects oral	31 mg/kg bw/day	

isopentane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	643 mg/m ³	
	Long-term systemic effects dermal	214 mg/kg bw/day	
	Long-term systemic effects oral	214 mg/kg bw/day	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

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

8.2.1 Appropriate engineering controls

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	0.4 mm	Class 6	
butyl rubber	> 480 minutes	0.7 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	White
Odour	Solvent-like 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	0.6 - 26.2 vol % ; Propellant
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 ; Liquid
Log Kow	Not applicable (mixture)
Vapour pressure	4000 hPa ; 20 °C ; Propellant
Absolute density	700 kg/m ³ ; 20 °C ; Liquid
Relative density	0.70 ; 20 °C ; Liquid
Relative vapour density	No data available in the literature
Particle size	Not applicable (aerosol)

9.2. Other information

No data available

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SECTION 10: Stability and reactivity

10.1. Reactivity

May be ignited by sparks. May build up electrostatic charges: risk of ignition. 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

(strong) acids.

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

TRIMFIX

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		> 5840 mg/kg bw		Rat	Read-across	
Dermal	LD50		2800 mg/kg bw - 3100 mg/kg bw	24 h	Rat (male / female)	Read-across	
Inhalation (vapours)	LC50		> 25.2 mg/l	4 h	Rat (male / female)	Experimental value	

pentane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 2000 mg/kg		Rat (male / female)	Experimental value	
Dermal						Data waiving	
Inhalation (vapours)	LC50		> 20 mg/l air	4 h	Rat (male / female)	Experimental value	

butanone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 423	2193 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 8050 ml/kg bw	24 h	Rabbit (male)	Experimental value	

isopentane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 2000 mg/kg		Rat (male / female)	Read-across	
Inhalation (vapours)	LC50	OECD 403	> 25.3 mg/l	4 h	Rat (male / female)	Read-across	

Resin acids and Rosin acids, potassium salts

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 423	> 2000 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male / female)	Experimental value	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

Reason for revision: 2; 3; 4; 5; 6; 8; 11; 12; 15

Publication date: 2000-10-04

Date of revision: 2025-05-20

TRIMFIX

TRIMFIX

No (test)data on the mixture available

Classification is based on the relevant ingredients

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

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

pentane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		1; 24; 48; 72 hours	Rabbit	Experimental value	Single treatment
Skin	Not irritating	Equivalent to OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	
Skin	Not irritating	Human observation	24 h		Human	Experimental value	

butanone

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

isopentane

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

Resin acids and Rosin acids, potassium salts

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	OECD 405		1; 24; 48; 72 hrs; 7 days	Rabbit	Experimental value	Single treatment
Skin	Not irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

Conclusion

Causes skin irritation.

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

TRIMFIX

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

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

pentane

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

butanone

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

isopentane

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

Reason for revision: 2; 3; 4; 5; 6; 8; 11; 12; 15

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BIG number: 32986

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TRIMFIX

Resin acids and Rosin acids, potassium salts

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal (on the ears)	Not sensitizing	OECD 429			Mouse (female)	Experimental value	

Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

Specific target organ toxicity

TRIMFIX

No (test)data on the mixture available

Classification is based on the relevant ingredients

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation (vapours)	NOAEC	Subacute toxicity test	14000 mg/m³ air	No neurotoxic effects	3 days (8h / day)	Rat (male)	Experimental value	
Inhalation			STOT SE cat.3	Central nervous system (drowsiness, dizziness)			Literature study	

pentane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	Dose level	Subacute toxicity test	2000 mg/kg bw/day	Kidney (no adverse systemic effects)	4 weeks (5 days / week)	Rat (male)	Experimental value	Not relevant
Dermal							Data waiving	
Inhalation (vapours)	NOAEC	OECD 413	20000 mg/m³	No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Inhalation			STOT SE cat.3	Drowsiness, dizziness			Annex VI	

butanone

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation (vapours)	NOAEC	Equivalent to OECD 413	5041 ppm	No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Inhalation (vapours)			STOT SE cat.3	Central nervous system (drowsiness, dizziness)			Annex VI	

isopentane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	Dose level	Subacute toxicity test	500 mg/kg bw/day	Kidney (no effect)	4 weeks (5 days / week)	Rat (male)	Experimental value	Not relevant
Dermal							Data waiving	
Inhalation (vapours)	NOEC	OECD 413	> 2220 ppm	No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across	
Inhalation (vapours)	NOEC	OECD 413	≥ 6646 ppm	Central nervous system (no effect)	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across	
Inhalation (vapours)			STOT SE cat.3	Drowsiness, dizziness			Annex VI	

Reason for revision: 2; 3; 4; 5; 6; 8; 11; 12; 15

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TRIMFIX

Resin acids and Rosin acids, potassium salts

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (diet)	NOAEL systemic effects	OECD 408	335.2 mg/kg bw/day	No adverse systemic effects	90 day(s)	Rat (male)	Experimental value	
Oral (diet)	NOAEL systemic effects	OECD 408	401.2 mg/kg bw/day	No adverse systemic effects	90 day(s)	Rat (female)	Experimental value	

Conclusion

May cause drowsiness or dizziness.
Not classified for subchronic toxicity

Mutagenicity (in vitro)

TRIMFIX

No (test)data on the mixture available
Judgement is based on the relevant ingredients
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S. typhimurium and E. coli)	No effect	Read-across	
Negative	Equivalent to OECD 473	Rat liver cells	No effect	Read-across	

pentane

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	EU Method B.10	Chinese hamster ovary (CHO)	No effect	Experimental value	

butanone

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 473	Rat liver cells	No effect	Experimental value	

isopentane

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	EU Method B.10	Chinese hamster ovary (CHO)	No effect	Read-across	

Resin acids and Rosin acids, potassium salts

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

Mutagenicity (in vivo)

TRIMFIX

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

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TRIMFIX

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Inhalation (vapours))	Equivalent to OECD 478	8 weeks (6h / day, 5 days / week)	Rat (male / female)	No effect	Read-across	

pentane

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Inhalation (vapours))	EU Method B.12	13 weeks (6h / day, 5 days / week)	Rat (male / female)	No effect	Experimental value	

butanone

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

isopentane

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Inhalation (vapours))	EU Method B.12	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Bone marrow (no effect)	Read-across	

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

TRIMFIX

No (test)data on the mixture available

Judgement is based on the relevant ingredients

pentane

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

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

TRIMFIX

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (vapours))	NOAEC	Developmental toxicity study	1200 ppm	10 days (6h / day)	Rat	No effect	Read-across	
Maternal toxicity (Inhalation (vapours))	NOAEC	Developmental toxicity study	1200 ppm	10 days (6h / day)	Rat	No effect	Read-across	

pentane

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL (P)	OECD 414	1000 mg/kg bw/day	10 day(s)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	1000 mg/kg bw/day	10 day(s)	Rat	No effect	Experimental value	
Effects on fertility (Inhalation (vapours))	NOAEC (P/F1)	Equivalent to OECD 416	24.08 mg/m ³		Rat (male / female)	No effect	Read-across	

butanone

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (vapours))	NOAEC	Equivalent to OECD 414	1002 ppm	10 days (7h / day)	Rat	Foetus (no effect)	Experimental value	
Maternal toxicity (Inhalation (vapours))	NOAEC	Equivalent to OECD 414	1002 ppm	10 days (7h / day)	Rat	No effect	Experimental value	
Effects on fertility (Inhalation (vapours))	NOAEC	Equivalent to OECD 416	2000 ppm		Rat (male / female)	No effect	Experimental value	

isopentane

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEC	OECD 414	1000 mg/kg bw/day	10 day(s)	Rat	No effect	Read-across	
Maternal toxicity (Oral (stomach tube))	NOAEC	OECD 414	1000 mg/kg bw/day	10 day(s)	Rat	No effect	Read-across	
Effects on fertility (Inhalation (vapours))	NOAEC	Equivalent to OECD 416	7000 ppm		Rat (male / female)	No effect	Read-across	

Reason for revision: 2; 3; 4; 5; 6; 8; 11; 12; 15

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TRIMFIX

Resin acids and Rosin acids, potassium salts

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (diet))	NOAEL	OECD 414	387.2 mg/kg bw/day	17 days (gestation, daily)	Rat (female)	Foetus (no effect)	Experimental value	
Maternal toxicity (Oral (diet))	NOAEL	OECD 414	199.3 mg/kg bw/day	17 days (gestation, daily)	Rat	No effect	Experimental value	
Effects on fertility (Oral (diet))	NOAEL	OECD 422	5000 ppm	35 day(s) - 42 day (s)	Rat (male / female)	No effect	Experimental value	

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

TRIMFIX

Judgement is based on the relevant ingredients

Not classified for aspiration toxicity

Toxicity other effects

TRIMFIX

No (test)data on the mixture available

butanone

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Skin				Skin (skin dryness or cracking)			Literature study	

Chronic effects from short and long-term exposure

TRIMFIX

No effects known.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

TRIMFIX

No (test)data on the mixture available

Classification is based on the relevant ingredients

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	11 mg/l WAF	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EL50	OECD 202	3 mg/l WAF	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	EL50	OECD 201	30 mg/l WAF - 100 mg/l WAF	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	EL10		0.64 mg/l	60 day(s)	Oncorhynchus mykiss			QSAR; Estimated value
Long-term toxicity aquatic crustacea	NOEC	OECD 211	0.17 mg/l WAF	21 day(s)	Daphnia magna	Static system	Fresh water	Read-across; GLP
Toxicity aquatic micro-organisms	EL50		> 1000 mg/l	15 h	Activated sludge		Fresh water	QSAR; Estimated value

Reason for revision: 2; 3; 4; 5; 6; 8; 11; 12; 15

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Revision number: 1000

BIG number: 32986

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TRIMFIX

pentane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	4.3 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	EC50		2.7 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	ErC50	OECD 201	11 mg/l	72 h	Selenastrum capricornutum	Static system	Fresh water	Experimental value; GLP
	NOEC	OECD 201	7.5 mg/l	72 h	Selenastrum capricornutum	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOELR		6.2 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR; Growth rate
Long-term toxicity aquatic crustacea	NOELR		11 mg/l	21 day(s)	Daphnia magna		Fresh water	QSAR; Reproduction
Toxicity aquatic micro-organisms	EL50		106 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR; Growth

butanone

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	2973 mg/l	96 h	Pimephales promelas	Static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EC50	OECD 202	308 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	ErC50	OECD 201	1220 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
	NOEC	OECD 201	566 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Toxicity aquatic micro-organisms	Toxicity threshold	Equivalent to DIN 38412/8	1150 mg/l	16 h	Pseudomonas putida	Static system	Fresh water	Experimental value

isopentane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	4.26 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Read-across; GLP
Acute toxicity crustacea	EC50	Equivalent to OECD 202	2.3 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Measured concentration
Toxicity algae and other aquatic plants	ErC50	OECD 201	10.7 mg/l	72 h	Selenastrum capricornutum	Static system	Fresh water	Read-across; GLP
Toxicity aquatic micro-organisms	EL50		130.9 mg/l	48 h	Tetrahymena pyriformis		Fresh water	Growth

Resin acids and Rosin acids, potassium salts

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	1.7 mg/l	96 h	Pimephales promelas	Static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EL50	OECD 202	> 100 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	EL50	OECD 201	> 100 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Nominal concentration

Conclusion

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	98 %; Oxygen consumption	28 day(s)	Experimental value

pentane

Biodegradation water

Method	Value	Duration	Value determination
Equivalent to OECD 301F	87 %; Oxygen consumption	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
	4 day(s)	5E5 /cm ³	Calculated value

Reason for revision: 2; 3; 4; 5; 6; 8; 11; 12; 15

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TRIMFIX

butanone

Biodegradation water

Method	Value	Duration	Value determination
OECD 301D	98 %; Oxygen consumption	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	96 h	1.5E6 /cm ³	Calculated value

isopentane

Biodegradation water

Method	Value	Duration	Value determination
Equivalent to OECD 301F	71.43 %; Oxygen consumption	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	31.795 h	1.5E6 /cm ³	Calculated value

Resin acids and Rosin acids, potassium salts

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B	80 %; GLP	28 day(s)	Experimental value

Conclusion

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

TRIMFIX

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Log Kow

Method	Remark	Value	Temperature	Value determination
KOWWIN		3 - 3.8	20 °C	QSAR

pentane

Log Kow

Method	Remark	Value	Temperature	Value determination
		3.5	25 °C	Experimental value

butanone

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		0.3	40 °C	Experimental value

isopentane

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		4	25 °C	Experimental value

Resin acids and Rosin acids, potassium salts

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		23 - 129; Fresh weight	20 day(s)	Oncorhynchus mykiss	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		5.0	20 °C	Experimental value

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

(log) Koc

Parameter	Method	Value	Value determination
Koc		325 - 1453	QSAR
log Koc		2.5 - 3.2	Calculated value

pentane

(log) Koc

Parameter	Method	Value	Value determination
log Koc		2.9	QSAR

TRIMFIX

butanone

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.65 - 1.3	Calculated value

isopentane

(log) Koc

Parameter	Method	Value	Value determination
log Koc		2.9	Read-across

Resin acids and Rosin acids, potassium salts

(log) Koc

Parameter	Method	Value	Value determination
log Koc		0.88 - 5.4	Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Fugacity Model Level III	2.7E-4 %		13 %	76 %	11 %	Calculated value

Conclusion

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

Contains component(s) that adsorb(s) into the soil

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

TRIMFIX

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)

Groundwater

Groundwater pollutant

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Greenhouse gases

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

Ozone-depleting potential (ODP)

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

pentane

Greenhouse gases

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

Groundwater

Groundwater pollutant

butanone

Greenhouse gases

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

Ozone-depleting potential (ODP)

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

Groundwater

Groundwater pollutant

isopentane

Greenhouse gases

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

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

Groundwater

Groundwater pollutant

Resin acids and Rosin acids, potassium salts

Greenhouse gases

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

Ozone-depleting potential (ODP)

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

TRIMFIX

SECTION 13: Disposal considerations

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

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 04 09* (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants containing organic solvents or other hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Should not be landfilled with household waste. 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
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14.2. UN proper shipping name

Proper shipping name	aerosols
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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
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14.2. UN proper shipping name

Proper shipping name	aerosols
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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

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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
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Reason for revision: 2; 3; 4; 5; 6; 8; 11; 12; 15

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84.6 %	
584.0 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
- hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane - pentane - butanone - isopentane	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.
- hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane - pentane - butanone - isopentane	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, — “whoopie” 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.
butanone	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	Mixtures for tattooing purposes are subject to the restrictions of Regulation (EU) 2020/2081

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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.

National legislation Belgium

TRIMFIX

No data available

National legislation The Netherlands

TRIMFIX

Waterbezwaarlijkheid	B (2); Algemene Beoordelingsmethodiek (ABM)
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butanone

Huidopname (wettelijk)	2-Butanon; H
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National legislation France

TRIMFIX

No data available

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Catégorie cancérigène	Hydrocarbures en C6-C12 (ensemble des)
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Catégorie mutagène	Hydrocarbures en C6-C12 (ensemble des)
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butanone

Risque de pénétration percutanée	Méthyléthylcétone; Risque de pénétration percutanée
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National legislation Germany

TRIMFIX

Lagerklasse (TRGS510)	2B: Aerosolpackungen und Feuerzeuge
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WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
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hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

TA-Luft	5.2.5
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pentane

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

TA-Luft	5.2.5
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TRGS900 - Risiko der Fruchtschädigung	Butanon; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
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Hautresorptive Stoffe	Butanon; H; Hautresorptiv
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isopentane

TA-Luft	5.2.5/I
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Resin acids and Rosin acids, potassium salts

TA-Luft	5.2.5/I
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National legislation Austria

TRIMFIX

No data available

butanone

besondere Gefahr der Hautresorption	Butanon; H
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National legislation United Kingdom

TRIMFIX

No data available

butanone

Skin absorption	Butan-2-one (methyl ethyl ketone); Sk
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National legislation Ireland

TRIMFIX

No data available

butanone

Skin resorption	Methyl ethyl ketone; Skin
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National legislation Italy

TRIMFIX

No data available

Other relevant data

TRIMFIX

No data available

butanone

TLV - Skin absorption	Methyl ethyl ketone; Skin; Danger of cutaneous absorption
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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.
H224 Extremely flammable liquid and vapour.
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.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

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

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