

SAFETY DATA SHEET*according to 1907/2006/EC, Article 31**Revision date: 19.01.2023***1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING****Product details****Trade name:** Laser Perfect cut**Article number:** 49901, 49911**Relevant identified uses of the substance or mixture and uses advised against:**

No further relevant information available.

Intended use: Car refinishing product/ Polishes and wax blends**Restrictions on use:** This material should not be used for any other purpose than the identified uses without expert advice. Improper use may cause potential health, safety and environmental risks.**Manufacturer/Supplier:**

Chamäleon GmbH

Rudolf-Diesel-Straße, 8a, 69115 Heidelberg

Germany

Further information obtainable from: Product Safety Department**Information in case of emergency:** + 49 70024112112 (CH)**2 – HAZARDS IDENTIFICATION****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Not Classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

Label elements**Precautionary statements**

P102 Keep out of reach of children.

Additional information:

EUH210 - Safety data sheet available on request.

EUH208 - Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone(55965-84-9). May produce an allergic reaction.

Other hazards

If in eyes: this material may cause mechanical irritation.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
Aluminium Oxide (1344-28-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Glycerol (56-81-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2,2',2''-nitrilotriethanol (102-71-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Sodium Nitrate (7631-99-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
White mineral oil (petroleum)(8042-47-5)	The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

3- COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aluminium Oxide	CAS-No.: 1344-28-1 EC-No.: 215-691-6 REACH-no: 01-2119529248-35	10 – 30	Not Classified
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	CAS-No.: 64742-47-8 EC-No.: 926-141-6 REACH-no: 01-2119456620-43	1 – 10	Asp. Tox. 1, H304
White mineral oil (petroleum)	CAS-No.: 8042-47-5 EC-No.: 232-455-8 REACH-no: 2119487078-27	1 – 10	Asp. Tox. 1, H304
Glycerol	CAS-No.: 56-81-5 EC-No.: 200-289-5 REACH-no: 01-2119471987-18	1 – 10	Not Classified
2,2',2''-nitrilotriethanol	CAS-No.: 102-71-6 EC-No.: 203-049-8 REACH-no: 01-2119486482-31	0.01 – 1	Not Classified
Diethyl phthalate	CAS-No.: 84-66-2 EC-No.: 201-550-6 REACH-no: 01-2119486682-27	< 0.05	Not Classified
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-60	< 0.05	Skin Sens. 1, H317 Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Irrit. 2, H315 Aquatic Acute 1, H400
Sodium Nitrate	CAS-No.: 7631-99-4 EC-No.: 231-554-3 REACH-no: 01-2119488221-41	< 0.003	Ox. Sol. 3, H272 Eye Irrit. 2, H319

5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	CAS-No.: 55965-84-9 EC-No.: 911-418-6 EC Index-No.: 613-167-00-5 REACH-no: 01-2120764691-48	< 0.0015	Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=10)
Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
White mineral oil (petroleum)	CAS-No.: 8042-47-5 EC-No.: 232-455-8 REACH-no: 2119487078-27	(0 ≤ C < 100) Asp. Tox. 1, H304	
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-60	(0.05 ≤ C ≤ 100) Skin Sens. 1, H317	
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	CAS-No.: 55965-84-9 EC-No.: 911-418-6 EC Index-No.: 613-167-00-5 REACH-no: 01-2120764691-48	(0.0015 ≤ C ≤ 100) Skin Sens. 1A, H317 (0.06 ≤ C < 0.6) Skin Irrit. 2, H315 (0.06 ≤ C < 0.6) Eye Irrit. 2, H319 (0.6 ≤ C ≤ 100) Skin Corr. 1C, H314 (0.6 ≤ C ≤ 100) Eye Dam. 1, H318	

Comments: Contains amongst other ingredients:

5-15% aliphatic hydrocarbons; 5-15% zeolites; nonionic surfactants, polycarboxylates, fragrance, chloromethylisothiazolinone, methylisothiazolinone, benzisothiazolinone.

Full text of H- and EUH-statements: see section 16

4- FIRST - AID MEASURE

Description of first aid measures

General information. Call a poison center or a doctor if you feel unwell.

After inhalation Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

After contact with skin Wash skin with plenty of water. Take off contaminated clothing. If skin irritation

- occurs: Get medical advice/attention.
After contact with eyes Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
After ingestion Call a poison center or a doctor if you feel unwell. Rinse mouth out with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed
Symptoms/effects after skin contact: Contact during a long period may cause light irritation.
Symptoms/effects after eye contact: May cause eye irritation.
Symptoms/effects after ingestion: May cause irritation to the digestive tract. Ingestion may cause nausea and vomiting.
Indication of any immediate medical attention and special treatment needed.
Treat symptomatically.

5– FIRE - FIGHTING MEASURE

Extinguishing media

Suitable extinguishing agents:

Water spray. Dry powder. Foam. Carbon dioxide

Unsuitable extinguishing media

None known

Special hazards arising from the substance or mixture

Fire hazard: No fire hazard.

Explosion hazard: Product is not explosive.

Reactivity in case of fire: Fire could produce a combination of irritating and toxic gases.

Hazardous decomposition products in case of fire: Toxic fumes may be released. Carbon monoxide.

Carbon dioxide. Nitrogen oxides.

Advice for firefighters

Precautionary measures fire: Keep container closed when not in use. Eliminate all ignition sources if safe to do so. Keep cool. Protect from sunlight.

Firefighting instructions: Fight fire with normal precautions from a reasonable distance. Get the package away from the fire if this can be done without risk.

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information: High temperature decomposition products are harmful by inhalation.

6– ACCIDENTAL RELEASE MEASURE

Personal precautions, protective equipment and emergency procedures

General measures: Avoid contact with skin and eyes. Stop leak if safe to do so. Clean up any spills as

- soon as possible, using an absorbent material to collect it.

For non-emergency personnel

Protective equipment: Wear recommended personal protective equipment.

Emergency procedures: Ventilate spillage area. Avoid contact with eyes. Evacuate area.

For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures: Evacuate unnecessary personnel. Stop leak if safe to do so. Cover spill with non combustible material, e.g.: sand/earth.

Environmental precautions:

Avoid release to the environment.

Methods and material for containment and cleaning up:

For containment: Collect spillage.

Methods for cleaning up: Take up liquid spill into absorbent material. Absorb spilled material with sand or earth. Clean contaminated surfaces with an excess of water. Shovel or sweep up and put in a closed container for disposal.

Other information: Dispose of materials or solid residues at an authorized site.

Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

7- HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool. Keep at temperatures above freezing.

Allowing freezing conditions may degrade product.

Incompatible products: Oxidizing agent. Strong acids. Strong bases.

Incompatible materials: Direct sunlight. Heat sources.

Information on mixed storage: Store away from foodstuffs.

Storage area: Store away from heat. Store in a well-ventilated place.

Special rules on packaging: Keep only in original container. Store in a closed container.

Packaging materials: Keep only in the original container in a cool, well-ventilated place away from combustible materials.

Specific end use(s)

Refer to Section 1.2 - Relevant identified uses.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

National occupational exposure and biological limit values

5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	0.05 mg/m ³ (5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-methyl-2,3-dihydroisothiazol-3-one mixture in ratio 3:1)
OEL chemical category	Skin sensitizer
Switzerland - Occupational Exposure Limits	
Local name	2,3-Dihydro-isothiazol-3-one de 5-chloro-2-méthyle et 2,3-dihydro-isothiazol-3-one de 2-méthyle [2,3-Dihydro-isothiazol-3-one de 5-chloro-2-méthyle, 2,3-Dihydro-isothiazol-3-one de 2-méthyle] / 5-Chlor-2-methyl-2,3-dihydro-isothiazol-3-on und 2-Methyl-2,3-dihydroisothiazol-3-on [2-Methyl-2,3-dihydroisothiazol-3-on, 5-Chlor-2-methyl-2,3-dihydroisothiazol-3-on]
MAK (OEL TWA) [1]	0.2 mg/m ³ (i) / (e)
KZGW (OEL STEL)	0.4 mg/m ³ (i) / (e)
Critical toxicity	VRS, Peau, Yeux / OAW, Haut, Auge
Notation	S, SS _C / S, SS _C
Regulatory reference	www.suva.ch, 28.03.2022
Sodium Nitrate (7631-99-4)	
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	6 mg/m ³ (dust)

White mineral oil (petroleum) (8042-47-5)

Germany - Occupational Exposure Limits (TRGS 900)

Local name	Weißes Mineralöl (Erdöl)
AGW (OEL TWA) [1]	5 mg/m ³ (A)
Peak exposure limitation factor	4(II)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden
Regulatory reference	TRGS900

Switzerland - Occupational Exposure Limits

Local name	Huile de paraffine / Weissöl, pharmazeutisch
MAK (OEL TWA) [1]	5 mg/m ³ (i) / (e)
Critical toxicity	Poumons / Lunge
Notation	SS _C / SS _C
Remark	NIOSH, DFG
Regulatory reference	www.suva.ch, 28.03.2022

Aluminium Oxide (1344-28-1)

Austria - Occupational Exposure Limits

MAK (OEL TWA)	5 mg/m ³ (respirable fraction, smoke)
MAK (OEL STEL)	10 mg/m ³ (respirable fraction, smoke)

Belgium - Occupational Exposure Limits

Local name	Aluminium (métal et composés insolubles, fraction alvéolaire) # Aluminium (metaal en onoplosbare verbindingen, inadembare fractie)
OEL TWA	1 mg/m ³

Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	10 mg/m ³ (total dust, inhalable particles) 4 mg/m ³ (respirable dust)
Denmark - Occupational Exposure Limits	
OEL TWA [1]	5 mg/m ³ (total) 2 mg/m ³ (respirable)
Estonia - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (total dust) 4 mg/m ³ (respirable dust)
France - Occupational Exposure Limits	
Local name	Aluminium (Trioxyde de di-)
VME (OEL TWA)	10 mg/m ³
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Greece - Occupational Exposure Limits	
Local name	Αλουμίνα, α-
OEL TWA	10 mg/m ³ αναπν. 5 mg/m ³ εισπν.
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	6 mg/m ³ (respirable dust)
Ireland - Occupational Exposure Limits	
Local name	Aluminium oxides

OEL TWA [1]	10 mg/m ³ total inhalable dust 4 mg/m ³ respirable dust
Regulatory reference	Chemical Agents Code of Practice 2021
Latvia - Occupational Exposure Limits	
OEL TWA	6 mg/m ³ (disintegration aerosol)
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	5 mg/m ³ (inhalable fraction) 2 mg/m ³ (respirable fraction)
Poland - Occupational Exposure Limits	
Local name	Tritlenek glinu
NDS (OEL TWA)	2.5 mg/m ³ w przeliczeniu na Al: frakcja wdychalna 1.2 mg/m ³ w przeliczeniu na Al: frakcja respirabilna
Remark	Frakcja wdychalna – frakcja aerozolu wnikaćca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia. Frakcja respirabilna – frakcja aerozolu wnikaćca do dróg oddechowych, która stwarza zagrożenie dla zdrowia po zdeponowaniu w obszarze wymiany gazowej.
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica)
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen
Romania - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (aerosols) 3 mg/m ³ (dust (Aluminium and Aluminium oxides) 1 mg/m ³ (fume (Aluminium and Aluminium oxides)

OEL STEL	5 mg/m ³ (aerosols) 10 mg/m ³ (dust (Aluminium and Aluminium oxides) 3 mg/m ³ (fume (Aluminium and Aluminium oxides)
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	4 mg/m ³ (inhalable dust)
Spain - Occupational Exposure Limits	
Local name	Óxido de aluminio (Corindón)
VLA-ED (OEL TWA) [1]	10 mg/m ³
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2022. INSHT
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	5 mg/m ³ (total dust) 2 mg/m ³ (respirable fraction)
United Kingdom - Occupational Exposure Limits	
Local name	Aluminium oxides
WEL TWA (OEL TWA) [1]	10 mg/m ³ inhalable dust 4 mg/m ³ respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Norway - Occupational Exposure Limits	
Local name	Aluminiumoksid
Grenseverdi (OEL TWA) [1]	10 mg/m ³
Korttidsverdi (OEL STEL)	15 mg/m ³ (equal to the limit value for Nuisance dust)
Remark	1) Grenseverdien er fastsatt lik verdien for sjenerende støv.
Regulatory reference	FOR-2021-06-28-2248
Switzerland - Occupational Exposure Limits	
Local name	Aluminium oxyde / Aluminiumoxid [Korund]
MAK (OEL TWA) [1]	3 mg/m ³ (respirable dust, smoke)

KZGW (OEL STEL)	24 mg/m ³ (respirable dust, smoke)
Critical toxicity	Formel / Formal
Notation	B / B
Remark	NIOSH
Regulatory reference	www.suva.ch, 28.03.2022
Switzerland - BAT	
Local name	Aluminium oxyde / Aluminiumoxid
BAT	50 µg/g creatinine (0.21 µmol/mmol cr.; Paramètre biologique: Aluminium; Substrat d'examen: Urine; Moment du prélèvement: Exposition de longue durée: après plusieurs périodes de travail.) / (0.21 µmol/mmol cr.; Biologischer Parameter: Aluminium; Untersuchungsmaterial: Urin; Probennahmezeitpunkt: Bei Langzeitexposition: nach mehreren vorangegangenen Schichten.)
Regulatory reference	Ordonnance 832.30 (OPA), article 50 al. 3, www.suva.ch/valeurs-limites / Verordnung 832.30 (VUV), Art. 50 Abs. 3, www.suva.ch/grenzwerte
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	1 mg/m ³
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-47-8)	
Switzerland - Occupational Exposure Limits	
Local name	Distillats légers de pétrole, hydrotraités (vapeurs) / Destillate (Erdöl), mit Wasserstoff behandelte, leichte (Dampf)
MAK (OEL TWA) [1]	350 mg/m ³
MAK (OEL TWA) [2]	50 ppm (vapour)
KZGW (OEL STEL)	700 mg/m ³
KZGW (OEL STEL) [ppm]	100 ppm (vapour)
Critical toxicity	SNC / ZNS

Notation	SS _C / SS _C
Remark	OSHA
Regulatory reference	www.suva.ch, 28.03.2022
Glycerol (56-81-5)	
Belgium - Occupational Exposure Limits	
Local name	Glycérine (brouillard) # Glycerine (nevel)
OEL TWA	10 mg/m ³
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	10 mg/m ³
Czech Republic - Occupational Exposure Limits	
Local name	Glycerol, mlha
PEL (OEL TWA)	10 mg/m ³
PEL (OEL TWA) [ppm]	2.6 ppm
NPK-P (OEL C)	15 mg/m ³
NPK-P (OEL C) [ppm]	3.9 ppm
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
Estonia - Occupational Exposure Limits	
OEL TWA	10 mg/m ³
Finland - Occupational Exposure Limits	
Local name	Glyseroli
HTP (OEL TWA) [1]	20 mg/m ³
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystministeriö)
France - Occupational Exposure Limits	
Local name	Glycérine (aérosols de)
VME (OEL TWA)	10 mg/m ³

Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Glycerin
AGW (OEL TWA) [1]	200 mg/m ³ (E)
Peak exposure limitation factor	2(I)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden
Regulatory reference	TRGS900
Greece - Occupational Exposure Limits	
Local name	Γλυκερίνη
OEL TWA	10 mg/m ³
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Poland - Occupational Exposure Limits	
Local name	Glicerol
NDS (OEL TWA)	10 mg/m ³ frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikaćca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia.
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (mist)

Slovakia - Occupational Exposure Limits

NPHV (OEL TWA) [1] 11 mg/m³

Slovenia - Occupational Exposure Limits

OEL TWA 200 mg/m³ (inhalable fraction)

OEL STEL 400 mg/m³ (inhalable fraction)

Spain - Occupational Exposure Limits

Local name Glicerina

VLA-ED (OEL TWA) [1] 10 mg/m³ nieblas

Regulatory reference Límites de Exposición Profesional para Agentes Químicos en España 2022. INSHT

United Kingdom - Occupational Exposure Limits

Local name Glycerol

WEL TWA (OEL TWA) [1] 10 mg/m³ mist

WEL STEL (OEL STEL) 30 mg/m³ (calculated-mist)

Regulatory reference EH40/2005 (Fourth edition, 2020). HSE

Switzerland - Occupational Exposure Limits

Local name Glycérine / Glycerin

MAK (OEL TWA) [1] 50 mg/m³ (i) / (e)

KZGW (OEL STEL) 100 mg/m³ (i) / (e)

Critical toxicity VRS / OAW

Notation SS_c / SS_c

Regulatory reference www.suva.ch, 28.03.2022

2,2',2"-nitrilotriethanol (102-71-6)

Belgium - Occupational Exposure Limits

Local name Triéthanolamine # Tri-ethanolamine

OEL TWA 5 mg/m³

Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
Czech Republic - Occupational Exposure Limits	
Local name	Triethanolamin
PEL (OEL TWA)	5 mg/m ³
PEL (OEL TWA) [ppm]	0.8 ppm
NPK-P (OEL C)	10 mg/m ³
NPK-P (OEL C) [ppm]	1.6 ppm
Remark	D - při expozici se významně uplatňuje pronikání faktoru kůže, I - dráždí sliznice (oči, dýchací cesty), respektive kůže.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
Finland - Occupational Exposure Limits	
Local name	Trietanoliamiini
HTP (OEL TWA) [1]	5 mg/m ³
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	2,2',2''-Nitrilotriethanol
AGW (OEL TWA) [1]	1 mg/m ³ (E)
Peak exposure limitation factor	1(I)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden
Regulatory reference	TRGS900

Ireland - Occupational Exposure Limits	
Local name	Triethanolamine
OEL TWA [1]	5 mg/m ³
Regulatory reference	Chemical Agents Code of Practice 2021
Spain - Occupational Exposure Limits	
Local name	Trietanolamina
VLA-ED (OEL TWA) [1]	5 mg/m ³
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2022. INSHT
Sweden - Occupational Exposure Limits	
Local name	Trietanolamin
NGV (OEL TWA)	5 mg/m ³
NGV (OEL TWA) [ppm]	0.8 ppm
KTV (OEL STEL)	10 mg/m ³
KTV (OEL STEL) [ppm]	1.6 ppm
Remark	H (Ämnet kan lätt upptas genom huden. Det föreskrivna gränsvärdet bedöms ge tillräckligt skydd endast under förutsättning att huden är skyddad mot exponering för ämnet ifråga); V (Vägledande korttidsgränsvärde ska användas som ett rekommenderat högsta värde som inte bör överskridas)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
Norway - Occupational Exposure Limits	
Local name	Trietanolamin
Grenseverdi (OEL TWA) [1]	5 mg/m ³
Regulatory reference	FOR-2021-06-28-2248

Switzerland - Occupational Exposure Limits

Local name	Triéthanolamine / Triethanolamin
MAK (OEL TWA) [1]	5 mg/m ³ (i) / (e)
KZGW (OEL STEL)	5 mg/m ³ (i) / (e)
Critical toxicity	VRS, Peau, Yeux / OAW, Haut, Auge
Notation	SSc / SSc
Remark	NIOSH
Regulatory reference	www.suva.ch, 28.03.2022

USA - ACGIH - Occupational Exposure Limits

Local name	Triethanolamine
ACGIH OEL TWA	5 mg/m ³
Remark (ACGIH)	TLV® Basis: Eye & skin irr
Regulatory reference	ACGIH 2022

Diethyl phthalate (84-66-2)

Austria - Occupational Exposure Limits

MAK (OEL TWA)	3 mg/m ³ (Phthalic acid ester)
MAK (OEL STEL)	5 mg/m ³ (Phthalic acid ester)

Belgium - Occupational Exposure Limits

Local name	Phtalate de diéthyle # Diethylftalaat
OEL TWA	5 mg/m ³
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021

Bulgaria - Occupational Exposure Limits

Local name	Диетилфталат
OEL TWA	5 mg/m ³

Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	5 mg/m ³
KGVI (OEL STEL)	10 mg/m ³
Denmark - Occupational Exposure Limits	
OEL TWA [1]	3 mg/m ³
Estonia - Occupational Exposure Limits	
OEL TWA	3 mg/m ³
OEL STEL	5 mg/m ³
Finland - Occupational Exposure Limits	
Local name	Dietyyliftalaatti
HTP (OEL TWA) [1]	5 mg/m ³
HTP (OEL STEL)	10 mg/m ³
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
France - Occupational Exposure Limits	
Local name	Phtalate de diéthyle
VME (OEL TWA)	5 mg/m ³
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Greece - Occupational Exposure Limits	
Local name	Φθαλκός διαιθυλεστέρας
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³

Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Ireland - Occupational Exposure Limits	
Local name	Diethyl phthalate
OEL TWA [1]	5 mg/m ³
OEL STEL	10 mg/m ³
Regulatory reference	Chemical Agents Code of Practice 2021
Latvia - Occupational Exposure Limits	
OEL TWA	0.5 mg/m ³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	3 mg/m ³
TPRV (OEL STEL)	5 mg/m ³
Poland - Occupational Exposure Limits	
Local name	Ftalan dietylu
NDS (OEL TWA)	3 mg/m ³ frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikaćca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia.
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen
Spain - Occupational Exposure Limits	
Local name	Ftalato de dietilo
VLA-ED (OEL TWA) [1]	5 mg/m ³

Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2022. INSHT
Sweden - Occupational Exposure Limits	
Local name	Dietylftalat
NGV (OEL TWA)	3 mg/m ³
KTV (OEL STEL)	5 mg/m ³
Remark	V (Vägledande korttidsgränsvärde ska användas som ett rekommenderat högsta värde som inte bör överskridas); 12 (För de ftalater som inte har ämnesspecifika gränsvärden gäller gränsvärdet för ftalater uttryckt i mg/m ³)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom - Occupational Exposure Limits	
Local name	Diethyl phthalate
WEL TWA (OEL TWA) [1]	5 mg/m ³
WEL STEL (OEL STEL)	10 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Norway - Occupational Exposure Limits	
Local name	Dietylftalat
Grenseverdi (OEL TWA) [1]	3 mg/m ³
Korttidsverdi (OEL STEL)	6 mg/m ³ (value calculated)
Regulatory reference	FOR-2021-06-28-2248
Switzerland - Occupational Exposure Limits	
Local name	Phtalate de diéthyle / Diethylphthalat
MAK (OEL TWA) [1]	5 mg/m ³ (i) / (e)
Critical toxicity	VRS / OAW
Regulatory reference	www.suva.ch, 28.03.2022

USA - ACGIH - Occupational Exposure Limits

Local name	Diethyl phthalate
ACGIH OEL TWA	5 mg/m ³
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2022

Recommended monitoring procedures No additional information available

Air contaminants formed No additional information available

DNEL and PNEC No additional information available

Control banding No additional information available

Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection

Safety glasses

Hand protection:

Protective gloves. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl").

Skin protection

Wear suitable protective clothing.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. The fine-dust mask with exhale Valve is recommended to use when dust and mist exceed exposure limits in air, according to EN149:2001 + A1:2009 FFP2 NR standard. The respiratory mask should be worn when respiratory hazards has been identified and evaluated. Respiratory protection should be always determined on quantitative exposure assessments.

Environmental exposure controls Avoid release to the environment

Consumer exposure controls:

The substance is not classified for human health hazards or for environment effects and it is not PBT or vPvB so that no exposure assessment or risk characterisation is required. For tasks where the intervention of workers is required, the substance must be handled in accordance with good industrial hygiene and safety procedures.

9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

General Information:

Physical state	Liquid
Colour:	Cream
Odour:	Vanilla
Melting point	Not available
Freezing point	≈ 0 °C
Boiling point	100 °C
Flammability	Not applicable
Explosive properties	Product is not explosive.
Oxidising properties	Non oxidizing material according to EC criteria.
Explosive limits	Not available
Lower explosion limit	Not applicable.
Upper explosion limit	Not applicable.
Flash point	> 93 °C
Auto-ignition temperature	Not available
Decomposition temperature	Not available
pH	8 – 9
Viscosity, kinematic	18000 – 24000 mm ² /s (20°C)
Viscosity, dynamic	18000 – 24000 cP Brookfield Viscosity
Solubility	Dispersible in water.
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50°C	Not available
Density	Not available
Relative density	1.18
Relative vapour density at 20°C	Not available
Particle characteristics	Not applicable

Other information

Information with regard to physical hazard classes

No additional information available

Other safety characteristics

VOC content: 112.1 g/l (9.5%)

10– STABILITY AND REACTIVITY

Reactivity The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable under normal conditions

- Possibility of hazardous reactions** No dangerous reactions known under normal conditions of use.
Conditions to avoid None under recommended storage and handling conditions (see section 7).
Incompatible materials: Strong acids. Strong bases. Strong oxidizers
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 – TOXICOLOGICAL INFORMATION

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral): Not Classified

Acute toxicity (dermal): Not Classified

Acute toxicity (inhalation): Not Classified

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
LD50 oral rat	490 mg/kg bodyweight
LD50 oral	670 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight
LD50 dermal	4115 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	100 mg/l
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)	
LD50 oral rat	66 mg/kg bodyweight
LD50 dermal rat	> 1008 mg/kg bodyweight Animal: rat, Guideline: EPA OPP 81-2 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	0.17 mg/l air
Sodium Nitrate (7631-99-4)	
LD50 oral rat	≈ 3430 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 oral	3700 mg/kg
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

White mineral oil (petroleum) (8042-47-5)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Aluminium Oxide (1344-28-1)

LD50 oral rat	> 15900 mg/kg bodyweight
LC50 Inhalation - Rat	> 2.3 mg/l air

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-47-8)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 Inhalation - Rat	> 20 mg/l/4h

Glycerol (56-81-5)

LD50 oral rat	27200 mg/kg bodyweight Animal: rat, Animal sex: female
LD50 dermal rabbit	> 10 g/kg
LD50 dermal	56750 mg/kg
LC50 Inhalation - Rat	5.85 mg/l

2,2',2"-nitritotriethanol (102-71-6)

LD50 oral rat	6400 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight

Diethyl phthalate (84-66-2)

LD50 oral rat	8600 mg/kg
LD50 dermal rat	> 11200 mg/kg
LC50 Inhalation - Rat	> 4.64 mg/l (Exposure time: 6 h)

■ Skin corrosion/irritation : Not Classified
pH: 8 – 9

5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)	
pH	3.43 Temp.: 20 °C Concentration: 10 g/L
Sodium Nitrate (7631-99-4)	
pH	7 Temp.: 25 °C Remarks on result: 'other:'
Glycerol (56-81-5)	
pH	5.5 – 8
2,2',2''-nitrilotriethanol (102-71-6)	
pH	11

Serious eye damage/irritation : Not Classified
pH: 8 – 9

5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)	
pH	3.43 Temp.: 20 °C Concentration: 10 g/L
Sodium Nitrate (7631-99-4)	
pH	7 Temp.: 25 °C Remarks on result: 'other:'
Glycerol (56-81-5)	
pH	5.5 – 8
2,2',2''-nitrilotriethanol (102-71-6)	
pH	11

Respiratory or skin sensitisation : Not Classified
Germ cell mutagenicity : Not Classified
Carcinogenicity : Not Classified

2,2',2''-nitrilotriethanol (102-71-6)	
IARC group	3 - Not classifiable

2,2',2"-nitrilotriethanol (102-71-6)

NOAEL (chronic, oral, animal/male, 2 years)	63 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 451 (Carcinogenicity Studies)
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Reproductive toxicity : Not Classified

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)

NOAEL (animal/female, F1)	56.6 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EPA OPPTS 870.3800 (Reproduction and Fertility Effects)
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Aluminium Oxide (1344-28-1)

NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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STOT-single exposure : Not Classified

STOT-repeated exposure : Not Classified

5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)

LOAEL (dermal, rat/rabbit, 90 days)	0.525 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EPA OPP 82-3 (Subchronic Dermal Toxicity 90 Days)
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Sodium Nitrate (7631-99-4)

NOAEL (oral, rat, 90 days)	≥ 1500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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White mineral oil (petroleum) (8042-47-5)

NOAEL (oral, rat, 90 days)	≥ 1200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
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Aluminium Oxide (1344-28-1)

LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.015 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

2,2',2''-nitrilotriethanol (102-71-6)

NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
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Diethyl phthalate (84-66-2)

NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat
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Aspiration hazard : Not Classified

LASER PERFECT CUT

Viscosity, kinematic	18000 – 24000 mm ² /s (20°C)
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White mineral oil (petroleum) (8042-47-5)

Viscosity, kinematic	2 mm ² /s @ 40°C
Hydrocarbon	Yes

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-47-8)

Hydrocarbon	Yes
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2,2',2''-nitrilotriethanol (102-71-6)

Viscosity, kinematic	830.2 mm ² /s
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Information on other hazards No additional information available

12 – ECOLOGICAL INFORMATION

Toxicity

Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute): Not Classified

- Hazardous to the aquatic environment, long-term (chronic): Not Classified
Not rapidly degradable

LASER PERFECT CUT	
Persistence and degradability	Inherently biodegradable.
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-47-8)	
Persistence and degradability	No persistence data available for this product.
Glycerol (56-81-5)	
Biochemical oxygen demand (BOD)	0.87 g O ₂ /g substance
Chemical oxygen demand (COD)	1.16 g O ₂ /g substance
ThOD	1.217 g O ₂ /g substance
2,2',2''-nitrilotriethanol (102-71-6)	
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	1.5 g O ₂ /g substance
ThOD	2.04 g O ₂ /g substance

Bioaccumulative potential:

LASER PERFECT CUT	
Bioaccumulative potential	No indication of bio-accumulation potential.
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
BCF - Fish [1]	6.62
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 0.99
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)	
BCF - Fish [1]	41 – 54
Bioconcentration factor (BCF REACH)	3.6 (calculated) S 1177
Partition coefficient n-octanol/water (Log Pow)	0.75
Sodium Nitrate (7631-99-4)	
Partition coefficient n-octanol/water (Log Pow)	-3.8

Aluminium Oxide (1344-28-1)

Bioaccumulative potential	No bioaccumulation data available.
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Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-47-8)

Partition coefficient n-octanol/water (Log Kow)	6 – 8.2
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Glycerol (56-81-5)

BCF - Fish [1]	(no bioaccumulation)
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Partition coefficient n-octanol/water (Log Pow)	-1.75
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Partition coefficient n-octanol/water (Log Kow)	-1.76
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2,2',2"-nitrilotriethanol (102-71-6)

BCF - Fish [1]	0.4 – 3.9 l/kg
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Partition coefficient n-octanol/water (Log Pow)	-1.9
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Diethyl phthalate (84-66-2)

BCF - Fish [1]	117
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Partition coefficient n-octanol/water (Log Pow)	2.35 (at 20 °C)
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Mobility in soil:

LASER PERFECT CUT

Ecology - soil	Semi-solid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile.
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1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)

Surface tension	72.6 mN/m
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Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97
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5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.81 – 1
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Glycerol (56-81-5)

Surface tension 63.4 mN/m

Organic Carbon Normalized Adsorption Coefficient (Log Koc) 0

2,2',2"-nitrilotriethanol (102-71-6)

Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.06 – 1.27

Results of PBT and vPvB assessment:

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Endocrine disrupting properties:

No additional information available

Other adverse effects

No additional information available

13– DISPOSAL CONSIDERATION

Waste treatment methods

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

European List of Waste (LoW) code: 08 04 12 - adhesive and sealant sludges other than those mentioned in 08 04 11

14– TRANSPORT INFORMATION

In accordance with ADR / IMDG / IATA / ADN / RID

UN number or ID number: Not regulated

UN proper shipping name: Not regulated.

Transport hazard class(es): Not regulated.

Packing group: Not regulated.

Environmental hazards

Environmental hazards: Not regulated.

No supplementary information available

Special precautions for user

Overland transport Not regulated

- Transport by sea Not regulated
- Air transport Not regulated
- Inland waterway transport Not regulated
- Rail transport Not regulated
- Maritime transport in bulk according to IMO instruments**
- Not applicable.

15 – REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(b)	5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone ; White mineral oil (petroleum) ; Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics
3(c)	5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content: 112.1 g/l (9.5%)

Explosives Precursors Regulation (2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported to the relevant national contact point within 24 hours.

Name	CAS-No.	Combined Nomenclature code (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Sodium nitrate	7631-99-4	3102 50 00	ex 3824 99 96

Please see https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf

Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

France

Occupational diseases

Code Description

RG 49 Skin disorders caused by aliphatic, alicyclic amines or ethanolamines

RG 49 BIS Respiratory disorders caused by aliphatic amines, ethanolamines or isophoronediamine

RG 65 Eczematiform lesions of allergic mechanism

RG 66 Occupational rhinitis and asthma

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).

Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Pregnant/breastfeeding women working with the product must not

- be in direct contact with the product
- Switzerland**
- Storage class (LK) : LK 10/12 - Liquids
- Chemical safety assessment**
- No chemical safety assessment has been carried out

16-OTHER INFORMATION

Abbreviations and acronyms:

ATE Acute Toxicity Estimate
BCF Bioconcentration factor
IATA International Air Transport Association
IMDG International Maritime Dangerous Goods
IARC International Agency for Research on Cancer
LC50 Median lethal concentration
LD50 Median lethal dose
LOAEL Lowest Observed Adverse Effect Level
NOAEC No-Observed Adverse Effect Concentration
OECD Organisation for Economic Co-operation and Development
PBT Persistent Bioaccumulative Toxic
SDS Safety Data Sheet
ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
BLV Biological limit value
BOD Biochemical oxygen demand (BOD)
COD Chemical oxygen demand (COD)
DMEL Derived Minimal Effect level
DNEL Derived-No Effect Level
EC-No. European Community number
EC50 Median effective concentration
EN European Standard
NOAEL No-Observed Adverse Effect Level
NOEC No-Observed Effect Concentration
OEL Occupational Exposure Limit
PNEC Predicted No-Effect Concentration
RID Regulations concerning the International Carriage of Dangerous Goods by Rail
STP Sewage treatment plant
ThOD Theoretical oxygen demand (ThOD)
TLM Median Tolerance Limit

- VOC Volatile Organic Compounds
- CAS-No. Chemical Abstract Service number
- N.O.S. Not Otherwise Specified
- vPvB Very Persistent and Very Bioaccumulative
- ED Endocrine disrupting properties
- Full text of H- and EUH-statements:**
- Acute Tox. 2 (Dermal) Acute toxicity (dermal), Category 2
- Acute Tox. 2 (Inhalation) Acute toxicity (inhal.), Category 2
- Acute Tox. 3 (Oral) Acute toxicity (oral), Category 3
- Acute Tox. 4 (Oral) Acute toxicity (oral), Category 4
- Aquatic Acute 1 Hazardous to the aquatic environment – Acute Hazard, Category 1
- Aquatic Chronic 1 Hazardous to the aquatic environment – Chronic Hazard, Category 1
- Asp. Tox. 1 Aspiration hazard, Category 1
- EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone(55965-84-9). May produce an allergic reaction.
- EUH210 Safety data sheet available on request.
- Eye Dam. 1 Serious eye damage/eye irritation, Category 1
- Eye Irrit. 2 Serious eye damage/eye irritation, Category 2
- H272 May intensify fire; oxidiser.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H310 Fatal in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H330 Fatal if inhaled.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- Ox. Sol. 3 Oxidising Solids, Category 3
- Skin Corr. 1C Skin corrosion/irritation, Category 1, Sub-Category 1C
- Skin Irrit. 2 Skin corrosion/irritation, Category 2
- Skin Sens. 1 Skin sensitisation, Category 1
- Skin Sens. 1A Skin sensitisation, category 1A

The information contained in these sheets is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects and should not be construed as any guarantee of technical performance or suitability for particular applications.