



Light Red 1

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 12/21/2021 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : Light Red 1
Product code : LTLR1
Product group : Finished Ink

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

1.2.1. Relevant identified uses

Intended for professional use as tattoo ink/permanent makeup ink

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Ink Projects LLC
460 Greenway Industrial Drive, Suite A
29708 Fort Mill, SC

1.4. Emergency telephone number

Emergency number : +1-813-248-0585
In EU: In case of emergency search for territorial toxicological emergency number or call 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Specific target organ toxicity — single exposure, Category 1 H370
Specific target organ toxicity — Repeated exposure, Category 1 H372
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes damage to organs through prolonged or repeated exposure. Causes damage to organs.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP) : Danger
Contains : Red 101 (CI:77491), White 6 (CI:77891)
Hazard statements (CLP) : H370 - Causes damage to organs.
H372 - Causes damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P308+P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
Unknown acute toxicity (CLP) - SDS : 63.05% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
91.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
58.91% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

2.3. Other hazards

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Red 101 (CI:77491)	CAS-No.: 1309-37-1 EC-No.: 215-168-2	35 – 40	STOT SE 1, H370 STOT RE 2, H373 Aquatic Chronic 3, H412
White 6 (CI:77891)	CAS-No.: 13463-67-7 EC-No.: 236-675-5 EC Index-No.: 022-006-00-2	15 – 25	STOT RE 1, H372 Aquatic Chronic 3, H412
Glycerin	CAS-No.: 56-81-5 EC-No.: 200-289-5	6 – 7	Acute Tox. 4 (Inhalation:dust,mist), H332
Propylene Glycol	CAS-No.: 57-55-6 EC-No.: 200-338-0	5 – 6	STOT SE 1, H370 STOT SE 3, H336
Ethoxylated Fatty Alcohols	CAS-No.: 9004-98-2	1 – 1.7	Acute Tox. 4 (Dermal), H312 Aquatic Chronic 3, H412

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. In case of no improvement get medical advice/attention.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. In case of no improvement get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell. In case of no improvement get medical advice/attention.

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.2. 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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray.

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Glycerin (56-81-5)

Belgium - Occupational Exposure Limits

Local name	Glycérine (brouillard) # Glycerine (nevel)
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OEL TWA	10 mg/m ³
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Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
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Croatia - Occupational Exposure Limits

Local name	Glicerol
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GVI (OEL TWA) [1]	10 mg/m ³
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Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
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Glycerin (56-81-5)	
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	
Local name	Glütseriin (glütserool, 1,2,3-propaantriool)
OEL TWA	10 mg/m ³
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	Glyseroli
HTP (OEL TWA) [1]	20 mg/m ³
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden ministeriö)
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)	
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 wnikać przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia.
Regulatory reference	Dz. U. 2018 poz. 1286

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Glycerin (56-81-5)	
Slovakia - Occupational Exposure Limits	
Local name	Glycerín
NPHV (OEL TWA) [1]	10 mg/m ³
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Slovenia - Occupational Exposure Limits	
Local name	glicerín
OEL TWA	200 mg/m ³
OEL STEL	400 mg/m ³
Remark	Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti)
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Spain - Occupational Exposure Limits	
Local name	Glicerina
VLA-ED (OEL TWA) [1]	10 mg/m ³ nieblas
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
United Kingdom - Occupational Exposure Limits	
Local name	Glycerol
WEL TWA (OEL TWA) [1]	10 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Switzerland - Occupational Exposure Limits	
Local name	Glycérine / Glycerin
MAK (OEL TWA) [1]	50 mg/m ³ (i) / (e)
KZGW (OEL STEL)	100 mg/m ³ (i) / (e)
Critical toxicity	VRS / OAW
Notation	SS _C / SS _C
Regulatory reference	www.suva.ch, 01.01.2021
Propylene Glycol (57-55-6)	
Croatia - Occupational Exposure Limits	
Local name	Propane-1,2-diol
GVI (OEL TWA) [1]	474 mg/m ³ ukupno pare i čestice 10 mg/m ³ samo čestice
GVI (OEL TWA) [2]	150 ppm ukupno pare i čestice
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
Ireland - Occupational Exposure Limits	
Local name	Propane-1,2-diol [Propylene glycol]
OEL TWA [1]	470 mg/m ³ total (vapour and particulates) 10 mg/m ³ particulates
OEL TWA [2]	150 ppm total (vapour and particulates)
Regulatory reference	Chemical Agents Code of Practice 2021

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Propylene Glycol (57-55-6)	
Latvia - Occupational Exposure Limits	
Local name	Propilēnglikols (1,2-propāndiols)
OEL TWA	7 mg/m ³
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325
Lithuania - Occupational Exposure Limits	
Local name	Propilenglikolis
IPRV (OEL TWA)	7 mg/m ³
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Poland - Occupational Exposure Limits	
Local name	Propano-1,2-diol
NDS (OEL TWA)	100 mg/m ³ pary i frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia.
Regulatory reference	Dz. U. 2018 poz. 1286
United Kingdom - Occupational Exposure Limits	
Local name	Propane-1,2-diol
WEL TWA (OEL TWA) [1]	474 mg/m ³ 10 mg/m ³
WEL TWA (OEL TWA) [2]	150 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Norway - Occupational Exposure Limits	
Local name	Propan-1,2-diol
Grenseverdi (OEL TWA) [1]	79 mg/m ³
Grenseverdi (OEL TWA) [2]	25 ppm
Regulatory reference	FOR-2021-06-28-2248
Red 101 (CI:77491) (1309-37-1)	
Austria - Occupational Exposure Limits	
Local name	Eisenoxide
MAK (OEL TWA)	5 mg/m ³ (A) 10 mg/m ³ (E)
MAK (OEL STEL)	10 mg/m ³ (A, 2x 60(Miw) min) 20 mg/m ³ (E, 2x 60(Miw) min)
Regulatory reference	BGBl. II Nr. 156/2021
Belgium - Occupational Exposure Limits	
Local name	Fer (trioxyde de) (fraction alvéolaire) # IJzeroxide (Fe2O3) (inadembare fractie)
OEL TWA	5 mg/m ³
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
Bulgaria - Occupational Exposure Limits	
Local name	Желязооксиди
OEL TWA	5 mg/m ³ (като желязо)

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Red 101 (CI:77491) (1309-37-1)	
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	
Local name	Željezov (III) oksid
GVI (OEL TWA) [1]	5 mg/m ³ dim (kao Fe) 10 mg/m ³ prašina, U (ukupna prašina) 4 mg/m ³ prašina, R (respirabilna prašina)
KGVI (OEL STEL)	10 mg/m ³ dim (kao Fe)
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
Denmark - Occupational Exposure Limits	
Local name	Jernoxid
OEL TWA [1]	3.5 mg/m ³ beregnet som Fe
Regulatory reference	BEK nr 1426 af 28. juni 2021
Estonia - Occupational Exposure Limits	
Local name	Raudoksiid (arvutatud rauale)
OEL TWA	3.5 mg/m ³
Remark	1 (Peentolm koosneb alla 2,5-mikromeetrise läbimõõduga osakestest, mis võivad jõuda koos sissehingatava õhuga kopsu alveoolidesse (respireeritav fraktsioon))
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	Rautaoksidi, huurut
HTP (OEL TWA) [1]	5 mg/m ³ Fe
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteist)
France - Occupational Exposure Limits	
Local name	Fer (Trioxyde de di-, fumées), en Fe
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	Σιδήρου (III) οξειδίο ως Fe
OEL TWA	10 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
Hungary - Occupational Exposure Limits	
Local name	VAS(III)-OXID (Fe-ra számitva)
AK (OEL TWA)	4 mg/m ³ respirabilis frakció
Remark	T (Azok az anyagok, amelyek egészségkárosító hatása TARTÓS expozíciót követően jelentkezik)

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Red 101 (CI:77491) (1309-37-1)	
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Ireland - Occupational Exposure Limits	
Local name	Iron oxide, fume (as Fe)
OEL TWA [1]	5 mg/m ³
OEL STEL	10 mg/m ³
Regulatory reference	Chemical Agents Code of Practice 2021
Lithuania - Occupational Exposure Limits	
Local name	Geležies oksidas
IPRV (OEL TWA)	3.5 mg/m ³ (kaip Fe); alveolinė frakcija
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Poland - Occupational Exposure Limits	
Local name	Tlenek żelaza (III)
NDS (OEL TWA)	5 mg/m ³ w przeliczeniu na Fe: frakcja wdychalna 2.5 mg/m ³ w przeliczeniu na Fe: frakcja respirabilna
NDSch (OEL STEL)	5 mg/m ³ w przeliczeniu na Fe: frakcja respirabilna 10 mg/m ³ w przeliczeniu na Fe: frakcja wdychalna
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	
Local name	Óxido de ferro
OEL TWA	5 mg/m ³ R (Fração respirável)
Remark	A4 (Agente não classificável como carcinogénico no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	Oxid feric
OEL TWA	5 mg/m ³ (Fumuri, pulberi)
OEL STEL	10 mg/m ³ (Fumuri, pulberi)
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
Slovakia - Occupational Exposure Limits	
Local name	Oxidy železa, dymy (ako Fe)
NPHV (OEL TWA) [1]	1.5 mg/m ³ respirabilná frakcia 4 mg/m ³ inhalovateľná frakcia
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Spain - Occupational Exposure Limits	
Local name	Óxido de hierro (III)
VLA-ED (OEL TWA) [1]	5 mg/m ³ polvo y humos, como Fe
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT

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Red 101 (CI:77491) (1309-37-1)	
Sweden - Occupational Exposure Limits	
Local name	Järnoxid (som Fe)
NGV (OEL TWA)	3.5 mg/m ³ respirabel fraktion
Remark	3 (Den respirabla fraktionen är de inhalerbara partiklar som når längst ner i luftvägarna, till alveolerna i lungorna)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom - Occupational Exposure Limits	
Local name	Iron oxide
WEL TWA (OEL TWA) [1]	5 mg/m ³ 10 mg/m ³ 4 mg/m ³
WEL STEL (OEL STEL)	10 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	Járnnoxíð, sem Fe, örfint ryk
OEL TWA	3.5 mg/m ³
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Jern(III)oksid (beregnet som Fe)
Grenseverdi (OEL TWA) [1]	3 mg/m ³
Regulatory reference	FOR-2021-06-28-2248
Switzerland - Occupational Exposure Limits	
Local name	Oxydes de fer / Eisenoxide
MAK (OEL TWA) [1]	3 mg/m ³ (a) / (a)
Critical toxicity	Poumons, Fibpulm / Lunge, Lungenfibrose
Remark	NIOSH
Regulatory reference	www.suva.ch, 01.01.2021
USA - ACGIH - Occupational Exposure Limits	
Local name	Iron oxide (Fe ₂ O ₃)
ACGIH OEL TWA	5 mg/m ³ (Respirable fraction)
Remark (ACGIH)	TLV® Basis: Pneumoconiosis. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2021
White 6 (CI:77891) (13463-67-7)	
Austria - Occupational Exposure Limits	
Local name	Titandioxid (Alveolarstaub)
MAK (OEL TWA)	5 mg/m ³ (A)
MAK (OEL STEL)	10 mg/m ³ (A, 2x 60(Miw) min)
Regulatory reference	BGBI. II Nr. 156/2021

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White 6 (CI:77891) (13463-67-7)	
Belgium - Occupational Exposure Limits	
Local name	Titane (dioxyde de) # Titaandioxide
OEL TWA	10 mg/m ³
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
Bulgaria - Occupational Exposure Limits	
Local name	Титанов диоксид
OEL TWA	10 mg/m ³ (респирабилен прах)
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	
Local name	Titanov dioksid
GVI (OEL TWA) [1]	10 mg/m ³ U (ukupna prašina) 4 mg/m ³ R (respirabilna prašina)
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
Denmark - Occupational Exposure Limits	
Local name	Titandioxid
OEL TWA [1]	6 mg/m ³ beregnet som Ti
Regulatory reference	BEK nr 1426 af 28. juni 2021
Estonia - Occupational Exposure Limits	
Local name	Titaanoksiid
OEL TWA	5 mg/m ³
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
France - Occupational Exposure Limits	
Local name	Titane (dioxyde de), en Ti
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	Τιτανίου διοξείδιο
OEL TWA	10 mg/m ³ εισπν. 5 mg/m ³ αναπν.
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	Titanium dioxide
OEL TWA [1]	10 mg/m ³ total inhalable dust 4 mg/m ³ respirable dust
Regulatory reference	Chemical Agents Code of Practice 2021

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White 6 (CI:77891) (13463-67-7)	
Latvia - Occupational Exposure Limits	
Local name	Titāna dioksīds
OEL TWA	10 mg/m ³
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumi Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumi Nr. 92)
Lithuania - Occupational Exposure Limits	
Local name	Titano dioksidas
IPRV (OEL TWA)	5 mg/m ³
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Poland - Occupational Exposure Limits	
Local name	Ditlenek tytanu
NDS (OEL TWA)	10 mg/m ³ frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia. Obowiązuje jednocześnie oznaczanie stężeń frakcji respirabilnej krzemionki krystalicznej.
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Dióxido de titânio
OEL TWA	10 mg/m ³
Remark	A4 (Agente não classificável como carcinogénico no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	Dioxid de titan
OEL TWA	10 mg/m ³
OEL STEL	15 mg/m ³
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
Slovakia - Occupational Exposure Limits	
Local name	Oxid titaničitý
NPHV (OEL TWA) [1]	5 mg/m ³
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Spain - Occupational Exposure Limits	
Local name	Dióxido de titanio
VLA-ED (OEL TWA) [1]	10 mg/m ³
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Sweden - Occupational Exposure Limits	
Local name	Titandioxid
NGV (OEL TWA)	5 mg/m ³ totaldamm

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White 6 (CI:77891) (13463-67-7)	
Remark	3 (Med totaldamm menas de partiklar (aerosoler) som fastnar på ett filter i den provtagare som beskrivs i Metodserien, Provtagning av totaldamm och respirabelt damm, Metod nr 1010, Arbetskyddsstyrelsen, numera Arbetsmiljöverket. Filterdiametern är normalt 37 mm, men kan även vara 25 mm. Trots sitt namn provtas inte den totala mängden luftburna partiklar med denna metod)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom - Occupational Exposure Limits	
Local name	Titanium dioxide
WEL TWA (OEL TWA) [1]	10 mg/m ³ 4 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	Títandíoxíð, sem Ti
OEL TWA	6 mg/m ³
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Titandioksid
Grenseverdi (OEL TWA) [1]	5 mg/m ³
Regulatory reference	FOR-2021-06-28-2248
Switzerland - Occupational Exposure Limits	
Local name	Dioxyde de titane / Titandioxid
MAK (OEL TWA) [1]	3 mg/m ³ (a) / (a)
Critical toxicity	VRI / UAW
Notation	SS _C / SS _C
Remark	NIOSH
Regulatory reference	www.suva.ch, 01.01.2021
USA - ACGIH - Occupational Exposure Limits	
Local name	Titanium dioxide
ACGIH OEL TWA	10 mg/m ³
Remark (ACGIH)	TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2021

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: red.
Odour	: Characteristic odour.
Odour threshold	: No data available
pH	: 7.5 – 8.5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: > 100 °C
Flash point	: > 93 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available

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Oxidising properties	: No data available
Explosive limits	: No data available
Particle size	: < 1 µm

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Unknown acute toxicity (CLP) - SDS	: 63.05% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 91.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 58.91% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
Skin corrosion/irritation	: Not classified pH: 7.5 – 8.5
Serious eye damage/irritation	: Not classified pH: 7.5 – 8.5
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

Red 101 (CI:77491) (1309-37-1)

IARC group	3 - Not classifiable
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White 6 (CI:77891) (13463-67-7)

IARC group	2B - Possibly carcinogenic to humans
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Reproductive toxicity	: Not classified
STOT-single exposure	: Causes damage to organs.

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Propylene Glycol (57-55-6)	
STOT-single exposure	Causes damage to organs. May cause drowsiness or dizziness.
Red 101 (CI:77491) (1309-37-1)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.
Red 101 (CI:77491) (1309-37-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
White 6 (CI:77891) (13463-67-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. 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	

12.2. Persistence and degradability

Ethoxylated Fatty Alcohols (9004-98-2)	
Persistence and degradability	Readily biodegradable in water.
Chemical oxygen demand (COD)	2.33 g O ₂ /g substance
Glycerin (56-81-5)	
Persistence and degradability	Readily biodegradable in water.
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
Propylene Glycol (57-55-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.96 – 1.08 g O ₂ /g substance
Chemical oxygen demand (COD)	1.63 g O ₂ /g substance
ThOD	1.69 g O ₂ /g substance
Red 101 (CI:77491) (1309-37-1)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

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White 6 (CI:77891) (13463-67-7)

Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

Ethoxylated Fatty Alcohols (9004-98-2)

Partition coefficient n-octanol/water (Log Pow)	6.13 Source: Quantitative Structure Activity Relation
Bioaccumulative potential	No bioaccumulation data available.

Glycerin (56-81-5)

Partition coefficient n-octanol/water (Log Pow)	-1.75 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Not bioaccumulative.

Propylene Glycol (57-55-6)

Partition coefficient n-octanol/water (Log Pow)	-1.07 (Experimental value, EU Method A.8: Partition Coefficient, 20.5 °C)
Bioaccumulative potential	Not bioaccumulative.

Red 101 (CI:77491) (1309-37-1)

Bioaccumulative potential	No bioaccumulation data available.
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White 6 (CI:77891) (13463-67-7)

Bioaccumulative potential	Not bioaccumulative.
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12.4. Mobility in soil

Glycerin (56-81-5)

Surface tension	63.4 mN/m (20 °C, 1000 g/l)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

Propylene Glycol (57-55-6)

Surface tension	71.6 mN/m (21.5 °C, 1.01 g/l, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.46 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

Red 101 (CI:77491) (1309-37-1)

Surface tension	Not applicable (solid)
Ecology - soil	Adsorbs into the soil.

White 6 (CI:77891) (13463-67-7)

Surface tension	No data available in the literature
Ecology - soil	Low potential for mobility in soil.

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12.5. Results of PBT and vPvB assessment

Component

Red 101 (CI:77491) (1309-37-1)	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
White 6 (CI:77891) (13463-67-7)	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
Glycerin (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
Propylene Glycol (57-55-6)	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

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

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Rail transport

Not regulated

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances as stated in Annex XVII as amended Is not classified as PBT or vPvB as in REACH Annex XIII. Complies with: REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended), COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), COMMISSION REGULATION (EU) 2020/2081 of 14 December 2020 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) as regards substances in tattoo inks or permanent make-up, Official Journal of the European Union as of 15th December 2020, L 423/6, REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Official Journal of the European Union L 353 of 31.12.2008, as amended), REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals, Official Journal of the European Union 27.7.2012, No L 201/60,

15.1.2. National regulations

France

Occupational diseases

Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamide; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

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)

Storage class (LGK, TRGS 510)

- : LGK 6.1D - Non-combustible substances of acute toxicity, category 3 / hazardous substances that are toxic or produce chronic effects

Joint storage table

LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13

Joint storage not permitted for

- : LGK 1, LGK 2A, LGK 4.1A, LGK 5.1A, LGK 5.1C, LGK 6.2, LGK 7

Joint storage with restrictions permitted for

- : LGK 3, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1B

Joint storage permitted for

- : LGK 2B, LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12, LGK 13, LGK 10-13

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Netherlands

ABM category	: A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment
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	: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

Switzerland

Storage class (LK)	: LK 6.1 - Toxic materials
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15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
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
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development

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Abbreviations and acronyms:	
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
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. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 1	Specific target organ toxicity — single exposure, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.