PVC liquide

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 01/02/2019 Revision date: 25/11/2025 Supersedes version of: 07/09/2023 Version: 3.0

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

1.1. Product identifier

Product form : Mixture
Name : PVC liquide
Product code : ·Blanc / White KC081001
·Beige / Sand KC081002
·Gris / Grey KC081004
·Bleu France / Adriatic Blue KC081005
·Bleu pâle / Pale Blue KC081006
·Transparent / Transparent KC081008
·Vert Caraibe / Caribbean Green KC081012
·Anthracite / Anthracite Grey KC081015
·Nordic Blue / Nordic Blue KC081054
·Aquasense Golden Riviera KC081020
·Aquasense Granit Blue / Fidji French Coast KC081021
·Aquasense Black Slate / Brown Basalt KC081023
·Aquasense Calacatta Marble / White Riviera / 3D Mosaic KC081025
·Aquasense Granit Grey / Fidji Vintage Grey / Imperial Grey KC081026
·Aquasense Granit Sand / Imperial Sand KC081027
·Aquasense Fidji Brown Sand / Granit Gold KC081042
·Aquasense Granit Green / Fidji Green / Imperial Green KC081045
·Aquasense Fidji Plus Green KC081055
·Aquasense Fidji Plus French Coast KC081056
·Aquasense Imperial Green KC081057
·INFINITY Bleu pale / INFINITY Pale Blue KC081051
·INFINITY Blanc / INFINITY White KC081052

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

Relevant identified uses

Main use category : Industrial use,Professional use
Use of the substance/mixture : Adhesives, sealants

1.3. Details of the supplier of the safety data sheet

CGT Alkor
75 rue Pasteur
60140 LIANCOURT
T 03 44 69 12 90, F 03 44 73 50 01
judy.pinet@cgtower.com

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	112 +356 2545 6508	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flam. Liq. 2	H225
Eye Irrit. 2	H319
Skin Sens. 1	H317
Carc. 2	H351
STOT SE 3	H336
STOT SE 3	H335
Aquatic Chronic 3	H412

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

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer (inhalation). May cause respiratory irritation. May cause drowsiness or dizziness. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07 GHS08

Signal word (CLP) : Danger

Contains : tetrahydrofuran; Amorphous silica; Isodecyl diphenyl phosphite; 4,5-dichloro-2-octyl-2H-isothiazol-3-one

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H351 - Suspected of causing cancer (inhalation).
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 - Ground and bond container and receiving equipment.
P261 - Avoid breathing vapours, mist.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get Obtain medical attention.
P312 - Call a POISON CENTER, doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P405 - Store locked up.

EUH-statements : EUH019 - May form explosive peroxides.
EUH071 - Corrosive to the respiratory tract.

Extra phrases : For professional users only.

2.3. Other hazards

Other hazards which do not result in classification : May form explosive peroxides.

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	tetrahydrofuran (109-99-9), Amorphous silica (112945-52-5), Ethene, chloro-, homopolymer (9002-86-2), Di-"isononyl" phthalate (28553-12-0), Isodecyl diphenyl phosphite, barium carbonate (513-77-9)(¹), 2-(2-butoxyethoxy)ethanol (112-34-5)(¹), Barium 4-dodecylphenolate (93922-04-4)(¹), Phenol (108-95-2)(¹), Barium dibenzoate (533-00-6)(¹), Titanium dioxide (13463-67-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	tetrahydrofuran (109-99-9), Amorphous silica (112945-52-5), Ethene, chloro-, homopolymer (9002-86-2), Di-"isononyl" phthalate (28553-12-0), Isodecyl diphenyl phosphite, barium carbonate (513-77-9)(¹), 2-(2-butoxyethoxy)ethanol (112-34-5)(¹), Barium 4-dodecylphenolate (93922-04-4)(¹), Phenol (108-95-2)(¹), Barium dibenzoate (533-00-6)(¹), Titanium dioxide (13463-67-7)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

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 substance(s) are 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	
Substance(s) not 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	tetrahydrofuran (109-99-9), Ethene, chloro-, homopolymer (9002-86-2), Di-"isononyl" phthalate (28553-12-0), Amorphous silica (112945-52-5), Titanium dioxide (13463-67-7), Isodecyl diphenyl phosphite, barium carbonate (513-77-9)(¹), 2-(2-butoxyethoxy)ethanol (112-34-5)(¹), Phenol (108-95-2)(¹), 4,5-dichloro-2-octyl-2H-isothiazol-3-one (64359-81-5)(¹), Barium 4-dodecylphenolate (93922-04-4)(¹), Barium dibenzoate (533-00-6)(¹)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
tetrahydrofuran substance with national workplace exposure limit(s) (IE, MT); substance with a Community workplace exposure limit	CAS-No.: 109-99-9 EC-No.: 203-726-8 EC Index-No.: 603-025-00-0 REACH-no: 01-2119444314-46	>75 - <80	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 (ATE=1650 mg/kg bodyweight) Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 STOT SE 3, H335 EUH019
Ethene, chloro-, homopolymer substance with national workplace exposure limit(s) (IE)	CAS-No.: 9002-86-2 EC-No.: 618-338-8	>0- <15	Not classified

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Di-"isononyl" phthalate substance with national workplace exposure limit(s) (IE)	CAS-No.: 28553-12-0 EC-No.: 249-079-5 REACH-no: 01-2119430798-28	>0- <10	Not classified
Amorphous silica	CAS-No.: 112945-52-5 EC-No.: 601-216-3	>0- <5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Titanium dioxide substance with national workplace exposure limit(s) (IE)	CAS-No.: 13463-67-7 EC-No.: 236-675-5 REACH-no: 01-2119489379-17	>0- <1	Not classified
Isodecyl diphenyl phosphite	EC-No.: 701-341-4 REACH-no: 01-2119968254-31	>0- <0.5	Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Chronic 2, H411
barium carbonate substance with national workplace exposure limit(s) (MT)	CAS-No.: 513-77-9 EC-No.: 208-167-3 EC Index-No.: 056-003-00-2 REACH-no: 01-2119489177-25	>0- <0.5	Acute Tox. 4 (Oral), H302 (ATE=1690 mg/kg bodyweight)
2-(2-butoxyethoxy)ethanol substance with national workplace exposure limit(s) (IE, MT); substance with a Community workplace exposure limit	CAS-No.: 112-34-5 EC-No.: 203-961-6 EC Index-No.: 603-096-00-8 REACH-no: 01-2119475104-44	>0- <0.5	Eye Irrit. 2, H319
Phenol substance with national workplace exposure limit(s) (IE, MT); substance with a Community workplace exposure limit	CAS-No.: 108-95-2 EC-No.: 203-632-7 EC Index-No.: 604-001-00-2 REACH-no: 01-2119471329-32	>0- <0.5	Acute Tox. 3 (Oral), H301 (ATE=100 mg/kg bodyweight) Acute Tox. 3 (Dermal), H311 (ATE=660 mg/kg bodyweight) Acute Tox. 3 (Inhalation:dust,mist), H331 (ATE=0.5 mg/l/4h) Skin Corr. 1B, H314 Muta. 2, H341 STOT RE 2, H373 Aquatic Chronic 2, H411
4,5-dichloro-2-octyl-2H-isothiazol-3-one	CAS-No.: 64359-81-5 EC-No.: 264-843-8 EC Index-No.: 613-335-00-8	>0- <0.5	Acute Tox. 4 (Oral), H302 (ATE=567 mg/kg bodyweight) Acute Tox. 2 (Inhalation), H330 (ATE=0.16 mg/l/4h) Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071
Barium 4-dodecylphenolate substance with national workplace exposure limit(s) (MT)	CAS-No.: 93922-04-4 EC-No.: 300-141-0 REACH-no: 01-2120769878-27	>0- <0.5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 Skin Sens. 1, H317 Repr. 1B, H360F Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Barium dibenzoate substance with national workplace exposure limit(s) (IE, MT)	CAS-No.: 533-00-6 EC-No.: 208-551-0 REACH-no: 01-2120769909-30	>0- <0.5	Acute Tox. 3 (Oral), H301 (ATE=100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Eye Dam. 1, H318

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
tetrahydrofuran	CAS-No.: 109-99-9 EC-No.: 203-726-8 EC Index-No.: 603-025-00-0 REACH-no: 01-2119444314-46	(25 ≤ C ≤ 100) Eye Irrit. 2; H319 (25 ≤ C ≤ 100) STOT SE 3; H335
Phenol	CAS-No.: 108-95-2 EC-No.: 203-632-7 EC Index-No.: 604-001-00-2 REACH-no: 01-2119471329-32	(1 ≤ C < 3) Eye Irrit. 2; H319 (1 ≤ C < 3) Skin Irrit. 2; H315 (3 ≤ C < 100) Skin Corr. 1B; H314
4,5-dichloro-2-octyl-2H-isothiazol-3-one	CAS-No.: 64359-81-5 EC-No.: 264-843-8 EC Index-No.: 613-335-00-8	(0.0015 ≤ C ≤ 100) Skin Sens. 1A; H317 (0.025 ≤ C < 5) Skin Irrit. 2; H315 (0.025 ≤ C < 3) Eye Irrit. 2; H319

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. Get medical advice and attention if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth out with water. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye irritation.

Chronic symptoms : Suspected of causing cancer.

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 : Carbon dioxide (CO2). Sand. Powder.

Unsuitable extinguishing media : High volume water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.
Explosion hazard : May form explosive peroxides.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO2). Silicon oxides.

5.3. Advice for firefighters

Firefighting instructions : Cool down the containers exposed to heat with a water spray. Contain the extinguishing fluids by bunding (the product is hazardous for the environment).
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Complete protective clothing. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure that there is a suitable ventilation system.

For non-emergency personnel

Emergency procedures : Evacuate the danger area. Access forbidden to unauthorised personnel. Ventilate spillage area. Avoid any direct contact with the product. Remove all sources of ignition.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Shovel into suitable and closed container for disposal.
Methods for cleaning up : Liquid spill: take up in sand, earth, vermiculite. Use only non-sparking tools.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of contaminated materials refer to section 13 : "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Avoid any direct contact with the product. Prevent unauthorised access. Manipulations are to be done only by qualified and authorised persons. Take precautionary measures against static discharge. Remove all sources of ignition. Use only non-sparking tools. Flame proof, lighting, electrical equipment and ventilation. Keep away from heat. Keep away from sources of ignition - No smoking. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers.
Hygiene measures : Do not drink, eat or smoke in the workplace. Handle in accordance with good industrial hygiene and safety practice. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store tightly closed in a dry, cool and well-ventilated place. Protect against frost. Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat and direct sunlight.
Storage temperature : 10 – 25 °C
Information on mixed storage : Keep away from food, drink and animal feeding stuffs.
Special rules on packaging : Store in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

tetrahydrofuran (109-99-9)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Tetrahydrofuran
IOEL TWA	150 mg/m³
	50 ppm
IOEL STEL	300 mg/m³
	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Ireland - Occupational Exposure Limits	
Local name	Tetrahydrofuran
OEL TWA	150 mg/m³
	50 ppm
OEL STEL	300 mg/m³
	100 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values), Skin (Substances which have the capacity to penetrate intact skin when they come in contact with it and be absorbed into the body. A substantial contribution to the total body burden via dermal exposure is possible)
Regulatory reference	Chemical Agents Code of Practice 2024
Ireland - Biological limit values	
Local name	Tetrahydrofuran
BMGV	2 mg/l Parameter: THF - Medium: urine - Sampling time: End of shift
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
Malta - Occupational Exposure Limits	
Local name	Tetrahydrofuran
OEL TWA	150 mg/m³
	50 ppm
OEL STEL	300 mg/m³
	100 ppm
Remark	Skin # Ġilda
Regulatory reference	S.L. 424.24 - Chemical Agents at Work Regulations (L.N. 356 of 2021) # L.S. 424.24 - Regolamenti dwar Aġenti Kimiċi fuq il-Post tax-Xogħol (A.L. 356 tal-2021)

Ethene, chloro-, homopolymer (9002-86-2)	
Ireland - Occupational Exposure Limits	
Local name	Polyvinyl chloride (PVC)
OEL TWA	10 mg/m³ I (Inhalable Fraction) 1 mg/m³ R (Respirable Fraction)
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
Di-"isononyl" phthalate (28553-12-0)	
Ireland - Occupational Exposure Limits	
Local name	Diisononyl phthalate
OEL TWA	5 mg/m³
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
barium carbonate (513-77-9)	
Malta - Occupational Exposure Limits	
Local name	Barium (soluble compounds as Ba) # Barium (kompost li jinħallu bħala Ba)
OEL TWA	0.5 mg/m³
Regulatory reference	S.L.424.24 - Chemical Agents at Work Regulations (L.N.356 of 2021)
2-(2-butoxyethoxy)ethanol (112-34-5)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-(2-Butoxyethoxy)ethanol
IOEL TWA	67.5 mg/m³
	10 ppm
IOEL STEL	101.2 mg/m³
	15 ppm
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
Ireland - Occupational Exposure Limits	
Local name	2-(2-Butoxyethoxy)ethanol
OEL TWA	67.5 mg/m³
	10 ppm
OEL STEL	101.2 mg/m³
	15 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
Malta - Occupational Exposure Limits	
Local name	2-(2-Butoxyethoxy)ethanol
OEL TWA	67.5 mg/m³
	10 ppm
OEL STEL	101.2 mg/m³
	15 ppm

2-(2-butoxyethoxy)ethanol (112-34-5)	
Regulatory reference	S.L. 424.24 - Chemical Agents at Work Regulations (L.N. 356 of 2021) # L.S. 424.24 - Regolamenti dwar Aġenti Kimiċi fuq il-Post tax-Xogħol (A.L. 356 tal-2021)
Barium 4-dodecylphenolate (93922-04-4)	
Malta - Occupational Exposure Limits	
Local name	Barium (soluble compounds as Ba) # Barium (kompost li jinħallu bħala Ba)
OEL TWA	0.5 mg/m³
Regulatory reference	S.L.424.24 - Chemical Agents at Work Regulations (L.N.356 of 2021)
Phenol (108-95-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Phenol
IOEL TWA	8 mg/m³
	2 ppm
IOEL STEL	16 mg/m³
	4 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
EU - Biological Limit Value (BLV)	
Local name	Phenol
BLV	120 mg/g creatinine Parameter: phenol - Medium: urine
Regulatory reference	SCOEL List of recommended health-based BLVs and BGVs
Ireland - Occupational Exposure Limits	
Local name	Phenol
OEL TWA	8 mg/m³
	2 ppm
OEL STEL	16 mg/m³
	4 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values), Skin (Substances which have the capacity to penetrate intact skin when they come in contact with it and be absorbed into the body. A substantial contribution to the total body burden via dermal exposure is possible)
Regulatory reference	Chemical Agents Code of Practice 2024
Ireland - Biological limit values	
Local name	Phenol
BMGV	120 mg/g creatinine Parameter: phenol - Medium: urine - Sampling time: End of shift - Notations: 8hr exposure to 2ppm phenol corresponds to an end of shift urine conc. of 120mg
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
Malta - Occupational Exposure Limits	
Local name	Phenol
OEL TWA	8 mg/m³
	2 ppm

Phenol (108-95-2)	
OEL STEL	16 mg/m³
	4 ppm
Remark	Skin # Ġilda
Regulatory reference	S.L. 424.24 - Chemical Agents at Work Regulations (L.N. 356 of 2021) # L.S. 424.24 - Regolamenti dwar Aġenti Kimiċi fuq il-Post tax-Xogħol (A.L. 356 tal-2021)
Barium dibenzoate (533-00-6)	
Ireland - Occupational Exposure Limits	
Local name	Barium compounds, (soluble compounds as Ba)
OEL TWA	0.5 mg/m³
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021
Malta - Occupational Exposure Limits	
Local name	Barium (soluble compounds as Ba) # Barium (kompost li jinħallu bħala Ba)
OEL TWA	0.5 mg/m³
Regulatory reference	S.L.424.24 - Chemical Agents at Work Regulations (L.N.356 of 2021)
Titanium dioxide (13463-67-7)	
Ireland - Occupational Exposure Limits	
Local name	Titanium dioxide
OEL TWA	10 mg/m³ total inhalable dust 4 mg/m³ respirable dust
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Depending on the degree of exposure, periodic medical surveillance is required. Reduce the length of exposure and the quantity used to the minimum necessary.

Personal protection equipment

Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Protective goggles. (EN ISO 16321)

Skin protection

Skin and body protection:
Protective clothing

Hand protection:
Protective gloves. Butyl rubber. The protective gloves to be used must comply with the specifications of the regulation 2016/425 and the resultant standard ISO 374-1. Breakthrough time : refer to the recommendations of the supplier

Respiratory protection

Respiratory protection:
Wear respiratory protection. Filter type: A/P2

Environmental exposure controls

Environmental exposure controls:
Do not allow product to spread into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Variable.
Odour	:	Characteristic.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	65.5 °C
Flammability	:	Highly flammable liquid and vapour.
Explosive properties	:	May form explosive peroxides.
Oxidising properties	:	Non oxidizing.
Lower explosion limit	:	1.8 vol %
Upper explosion limit	:	11.8 vol %
Flash point	:	-17 °C
Auto-ignition temperature	:	230 °C
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	Not available
Solubility	:	Material nearly insoluble 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	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

May form explosive peroxides.

10.4. Conditions to avoid

Heat sources. Ignition sources.

10.5. Incompatible materials

None to our knowledge.

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

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

tetrahydrofuran (109-99-9)	
LD50 oral rat	1650 mg/kg bodyweight (Published data)
LD50 dermal rat	> 2000 mg/kg bw/day (OECD 402 method)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Suspected of causing cancer (inhalation).
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : May cause drowsiness or dizziness. May cause respiratory irritation.
STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

tetrahydrofuran (109-99-9)	
LC50 fish	2160 mg/l/96h (Pimephales promelas (equivalent or similar to OECD Guideline 203))
EC50 Daphnia	3485 mg/l/48 h (Daphnia magna (Water flea) (equivalent or similar to OECD Guideline 202))

12.2. Persistence and degradability

PVC liquide	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	tetrahydrofuran (109-99-9), Amorphous silica (112945-52-5), Ethene, chloro-, homopolymer (9002-86-2), Di-"isononyl" phthalate (28553-12-0), Isodecyl diphenyl phosphite, barium carbonate (513-77-9)(¹), 2-(2-butoxyethoxy)ethanol (112-34-5)(¹), Barium 4-dodecylphenolate (93922-04-4)(¹), Phenol (108-95-2)(¹), Barium dibenzoate (533-00-6)(¹), Titanium dioxide (13463-67-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	tetrahydrofuran (109-99-9), Amorphous silica (112945-52-5), Ethene, chloro-, homopolymer (9002-86-2), Di-"isononyl" phthalate (28553-12-0), Isodecyl diphenyl phosphite, barium carbonate (513-77-9)(¹), 2-(2-butoxyethoxy)ethanol (112-34-5)(¹), Barium 4-dodecylphenolate (93922-04-4)(¹), Phenol (108-95-2)(¹), Barium dibenzoate (533-00-6)(¹), Titanium dioxide (13463-67-7)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not allow into drains or water courses. Collect all waste in suitable and labelled containers and dispose according to local legislation.

Additional information : The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal.

European List of Waste (LoW, EC 2000/532) : 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances

HP Code : HP3 - “Flammable:”
– flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
– flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
HP5 - “Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:” waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.
HP6 - “Acute Toxicity:” waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.
HP7 - “Carcinogenic:” waste which induces cancer or increases its incidence
HP4 - “Irritant – skin irritation and eye damage:” waste which on application can cause skin irritation or damage to the eye.
HP14 - “Ecotoxic:” waste which presents or may present immediate or delayed risks for one or more sectors of the environment
HP15 - “Waste capable of exhibiting a hazardous property listed above not directly displayed by the original waste”.

SECTION 14: Transport information

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

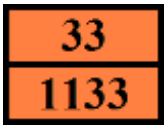
ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1133	UN 1133	UN 1133	UN 1133	UN 1133
14.2. UN proper shipping name				
ADHESIVES	ADHESIVES	Adhesives	ADHESIVES	ADHESIVES
14.3. Transport hazard class(es)				
3	3	3	3	3
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-E EmS-No. (Spillage): S-D	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1
Special provisions (ADR) : 640D
Limited quantities (ADR) : 5l
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001, IBC02, R001
Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1, TP8

Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage - Operation (ADR) : S2, S20
Hazard identification number (Kemler No.) : 33
Orange plates :



Tunnel restriction code (ADR) : D/E

Transport by sea

Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP8

Stowage category (IMDG) : B

Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provisions (IATA) : A3
ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Special provisions (ADN) : 640D
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E2
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 1

Rail transport

Classification code (RID) : F1
Special provisions (RID) : 640D
Limited quantities (RID) : 5L
Excepted quantities (RID) : E2
Packing instructions (RID) : P001, IBC02, R001
Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions (RID) : TP1, TP8

Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE7
Hazard identification number (RID) : 33

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. 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**	**Entry title or description**
40.	tetrahydrofuran	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 Regulation (EC) No 1272/2008 or not.

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 (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no 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)

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:
This sheet was updated (refer to the date at the top of this page). This sheet has been revised completely (changes were not marked).

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
EC50	Median effective concentration
LC50	Median lethal concentration
LD50	Median lethal dose
ED	Endocrine disruptor
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA (European Chemicals Agency). SDS of suppliers.

Full text of H- and EUH-statements:	
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3

Full text of H- and EUH-statements:	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
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
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic 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.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer (inhalation).
H360F	May damage fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.

Full text of H- and EUH-statements:	
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH019	May form explosive peroxides.
EUH071	Corrosive to the respiratory tract.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 2	H225	Expert judgement
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method
STOT SE 3	H336	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Chronic 3	H412	Calculation method

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.