Cargille Refractive Index Liquid Series M n_D = 1.701 - 1.735

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Revision Date: 14/05/2024 Date of Issue: 27/07/2015 Supersedes Date: 01/06/2016 Version: 3.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Form : Mixture

Product Name : Cargille Refractive Index Liquid Series M n_D = 1,701 - 1,735

Product Code : Cat No 18151, 18152, 1815X, 1815Y, 19151, 19152

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

1.2.1. Relevant Identified Uses

Use of the Substance/Mixture : For professional and R&D use only. Conditions of Intended Use: (ABBR. C.I.U.) As an Optical Refractive Index Liquid at normal room pressure 101,32 kPa (760 mm Hg), temperature 18°C to 40°C in a non misted/non airborne state in a room having a normal air changes (2)/ HR., in a trained and supervised laboratory/ industrial setting using standard Good Laboratory/ Good Manufacturing procedures.
Note: Product normally sold in 1/4 oz (7,4cc), 1 oz (30cc), 4 oz (120cc),and 16 oz (480cc) quantities. Used in single drop to a few cubic centimeters per application. See requisitioner for specific quantities involved.

1.2.2. Uses Advised Against

No additional information available

1.3. Details of the Supplier of the Safety Data Sheet

Cargille Laboratories
55 Commerce Road
Cedar Grove, NJ 07009-1289
T 973-239-6633
Website: www.cargille.com
email: Technical@Cargille.com

1.4. Emergency Telephone Number

Emergency Number : VelocityEHS
(800)255-3924 (North America)
+1 (813)248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008

Acute Tox. 4 (Oral)	H302
Skin Irrit. 2	H315
Eye Dam. 1	H318
STOT SE 3	H335
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

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

2.2. Label Elements

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

Hazard Pictograms (CLP) :

GHS05 GHS07 GHS09

Signal Word (CLP) : Danger

Hazard Statements (CLP) : H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary Statements (CLP) : P261 - Avoid breathing vapours, spray, mist.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
P302+P352 - IF ON SKIN: Wash with plenty of water.
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.
P310 - Immediately call a POISON CENTRE or doctor.
P312 - Call a POISON CENTRE or doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other Hazards

Other Hazards Not Contributing to the Classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Component	
Hydrogenated terphenyls (61788-32-7)	This substance meets the vPvB criteria of REACH regulation, annex XIII

The substance/mixture does not contain substance(s) equal to or greater than 0,1% by weight that are present in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or 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

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
Hydrogenated terphenyls substance listed as REACH Candidate (Terphenyl, hydrogenated) substance with national workplace exposure limit(s) (AT, BE, BG, CY, DE, DK, EE, ES, FI, FR, GB, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO, CH); substance with a Community workplace exposure limit; vPvB substance	(CAS-No.) 61788-32-7 (EC-No.) 262-967-7	30 – 60	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Methylene iodide	(CAS-No.) 75-11-6 (EC-No.) 200-841-5	50	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Terphenyls substance with national workplace exposure limit(s) (AT, BE, DK, ES, FI, FR, GB, GR, HR, IE, PT, NO, CH)	(CAS-No.) 26140-60-3 (EC-No.) 247-477-3	1,5 – 4	Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

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 : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-Aid Measures After Inhalation : When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-Aid Measures After Skin Contact : Remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-Aid Measures After Eye Contact : Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-Aid Measures After Ingestion : Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Effects : May cause respiratory irritation. Causes skin irritation. Harmful if swallowed. Causes serious eye damage.

Symptoms/Effects After Inhalation : Irritation of the respiratory tract and the other mucous membranes.

Symptoms/Effects After Skin Contact : Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Effects After Eye Contact : Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Effects After Ingestion : This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms : None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media : Water spray, fog, carbon dioxide (CO_2), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard : Not considered flammable but may burn at high temperatures.

Explosion Hazard : Product is not explosive.

Reactivity : Hazardous reactions will not occur under normal conditions.

Hazardous Combustion Products : Carbon oxides (CO, CO_2). Halogenated compounds. Irritating or toxic vapors.

5.3. Advice for Firefighters

Precautionary Measures Fire : Exercise caution when fighting any chemical fire.

Firefighting Instructions : Use water spray or fog for cooling exposed containers.

Protection During Firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information : Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures : Do not get in eyes, on skin, or on clothing. Do not breathe vapour, mist or spray.

6.1.1. For Non-Emergency Personnel

Protective Equipment : Use appropriate personal protective equipment (PPE).

Emergency Procedures : Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment : Equip cleanup crew with proper protection.

Emergency Procedures : Upon arrival at the scene, a first responder is expected to recognise the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up : Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling : Do not get in eyes, on skin, or on clothing. Avoid breathing (vapour, mist, spray). Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle empty containers with care because they may still present a hazard.

Hygiene Measures : Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures : Comply with applicable regulations.

Storage Conditions : Store in accordance with applicable national storage class systems. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

Incompatible Materials : Strong acids, strong bases, strong oxidisers.

7.3. Specific End Use(s)

For professional and R&D use only. Conditions of Intended Use: (ABBR. C.I.U.) As an Optical Refractive Index Liquid at normal room pressure 101,32 kPa (760 mm Hg), temperature 18°C to 40°C in a non misted/non airborne state in a room having a normal air changes (2)/ HR., in a trained and supervised laboratory/ industrial setting using standard Good Laboratory/ Good Manufacturing procedures.

Note: Product normally sold in 1/4 oz (7,4cc), 1 oz (30cc), 4 oz (120cc),and 16 oz (480cc) quantities. Used in single drop to a few cubic centimeters per application. See requisitioner for specific quantities involved.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Please see section 16 for the legal basis of limit value information in section 8.1, including the national legislation or provision which gives rise to a given limit.

Hydrogenated terphenyls (61788-32-7)		
EU	IOELV TWA (Legal Basis:2019/1831 EU in accor. with 98/24/EC)	19 mg/m³
EU	IOELV TWA (Legal Basis:2019/1831 EU in accor. with 98/24/EC)	2 ppm
EU	IOELV STEL (Legal Basis:2019/1831 EU in accor. with 98/24/EC)	48 mg/m³
EU	IOELV STEL (Legal Basis:2019/1831 EU in accor. with 98/24/EC)	5 ppm
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	19 mg/m³ (all isomers)
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	2 ppm (all isomers)
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	48 mg/m³ (all isomers)
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	5 ppm (all isomers)
Belgium	OEL TWA (Legal Basis:Royal Decree 21/01/2020)	5 mg/m³
Belgium	OEL TWA (Legal Basis:Royal Decree 21/01/2020)	0,5 ppm
Belgium	OEL STEL (Legal Basis:Royal Decree 21/01/2020)	48 mg/m³
Belgium	OEL STEL (Legal Basis:Royal Decree 21/01/2020)	5 ppm
Bulgaria	OEL TWA (Legal Basis:Reg. No. 13/10)	19 mg/m³
Bulgaria	OEL TWA (Legal Basis:Reg. No. 13/10)	2 ppm
Bulgaria	OEL STEL (Legal Basis:Reg. No. 13/10)	48 mg/m³
Bulgaria	OEL STEL (Legal Basis:Reg. No. 13/10)	5 ppm
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	19 mg/m³
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	2 ppm
Croatia	OEL STEL (Legal Basis:OG No. 91/2018)	48 mg/m³
Croatia	OEL STEL (Legal Basis:OG No. 91/2018)	5 ppm
Cyprus	OEL TWA (Legal Basis:KDP 16/2019)	19 mg/m³
Cyprus	OEL TWA (Legal Basis:KDP 16/2019)	2 ppm
Cyprus	OEL STEL (Legal Basis:KDP 16/2019)	48 mg/m³
Cyprus	OEL STEL (Legal Basis:KDP 16/2019)	5 ppm
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	4,4 mg/m³
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	0,4 ppm
Denmark	OEL STEL (Legal Basis:BEK No. 698 of 28/05/2020)	48 mg/m³
Denmark	OEL STEL (Legal Basis:BEK No. 698 of 28/05/2020)	5 ppm
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	19 mg/m³

Estonia	OEL TWA (Legal Basis:Regulation No. 105)	2 ppm
Estonia	OEL STEL (Legal Basis:Regulation No. 105)	48 mg/m³
Estonia	OEL STEL (Legal Basis:Regulation No. 105)	5 ppm
Estonia	OEL Chemical Category (Legal Basis:Regulation No. 105)	Skin notation
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	10 mg/m³
Finland	OEL STEL (Legal Basis:HTP-ARVOT 2020)	30 mg/m³
France	OEL STEL (Legal Basis:INRS ED 984)	48 mg/m³ (indicative limit)
France	OEL STEL (Legal Basis:INRS ED 984)	5 ppm (indicative limit)
France	OEL TWA (Legal Basis:INRS ED 984)	19 mg/m³
France	OEL TWA (Legal Basis:INRS ED 984)	2 ppm
Germany	OEL TWA (Legal Basis:TRGS 900)	19 mg/m³ (inhalable fraction)
Germany	OEL TWA (Legal Basis:TRGS 900)	2 ppm
Gibraltar	OEL TWA (Legal Basis:LN. 2018/181)	19 mg/m³
Gibraltar	OEL TWA (Legal Basis:LN. 2018/181)	2 ppm
Gibraltar	OEL STEL (Legal Basis:LN. 2018/181)	48 mg/m³
Gibraltar	OEL STEL (Legal Basis:LN. 2018/181)	5 ppm
Greece	OEL TWA (Legal Basis:PWHSE)	19 mg/m³
Greece	OEL TWA (Legal Basis:PWHSE)	2 ppm
Greece	OEL STEL (Legal Basis:PWHSE)	48 mg/m³
Greece	OEL STEL (Legal Basis:PWHSE)	5 ppm
Hungary	OEL TWA (Legal Basis:Decree No. 05/2020)	19 mg/m³
Hungary	OEL STEL (Legal Basis:Decree No. 05/2020)	48 mg/m³
Ireland	OEL TWA (Legal Basis:2020 COP)	19 mg/m³
Ireland	OEL TWA (Legal Basis:2020 COP)	2 ppm
Ireland	OEL STEL (Legal Basis:2020 COP)	48 mg/m³
Ireland	OEL STEL (Legal Basis:2020 COP)	5 ppm
USA ACGIH	OEL TWA (Legal Basis:IMDFN1)	0,5 ppm (nonirradiated)
Italy	OEL TWA (Legal Basis:Decree 81)	19 mg/m³
Italy	OEL TWA (Legal Basis:Decree 81)	2 ppm
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	19 mg/m³
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	2 ppm
Lithuania	OEL TWA (Legal Basis:HN 23:2011)	19 mg/m³
Lithuania	OEL TWA (Legal Basis:HN 23:2011)	2 ppm
Lithuania	OEL STEL (Legal Basis:HN 23:2011)	48 mg/m³
Lithuania	OEL STEL (Legal Basis:A-N 684)	5 ppm
Luxembourg	OEL TWA (Legal Basis:A-N 684)	19 mg/m³
Luxembourg	OEL TWA (Legal Basis:A-N 684)	2 ppm
Luxembourg	OEL STEL (Legal Basis:A-N 684)	48 mg/m³
Luxembourg	OEL STEL (Legal Basis:A-N 684)	5 ppm
Malta	OEL TWA (Legal Basis:MOHSAA Ch. 424)	19 mg/m³
Malta	OEL TWA (Legal Basis:MOHSAA Ch. 424)	2 ppm
Malta	OEL STEL (Legal Basis:MOHSAA Ch. 424)	48 mg/m³
Malta	OEL STEL (Legal Basis:MOHSAA Ch. 424)	5 ppm
Netherlands	OEL TWA (Legal Basis:OWCRLV)	19 mg/m³
Netherlands	OEL TWA (Legal Basis:OWCRLV)	2 ppm
Netherlands	OEL STEL (Legal Basis:OWCRLV)	48 mg/m³
Netherlands	OEL STEL (Legal Basis:OWCRLV)	5 ppm
Norway	OEL TWA (Legal Basis:FOR-2020-04-06-695)	19 mg/m³
Norway	OEL TWA (Legal Basis:FOR-2020-04-06-695)	2 ppm
Norway	OEL STEL (Legal Basis:FOR-2020-04-06-695)	48 mg/m³ (value from the regulation)
Norway	OEL STEL (Legal Basis:FOR-2020-04-06-695)	5 ppm (value from the regulation)
Poland	OEL TWA (Legal Basis:Dz. U. 2020 Nr. 61)	12,5 mg/m³
Poland	OEL TWA (Legal Basis:Dz. U. 2020 Nr. 61)	48 mg/m³
Portugal	OEL TWA (Legal Basis:Portuguese Norm NP 1796:2014)	19 mg/m³ (indicative limit value)
Portugal	OEL TWA (Legal Basis:Portuguese Norm NP 1796:2014)	2 ppm (indicative limit value)
Portugal	OEL STEL (Legal Basis:Portuguese Norm NP 1796:2014)	48 mg/m³ (indicative limit value)
Portugal	OEL STEL (Legal Basis:Portuguese Norm NP 1796:2014)	5 ppm (indicative limit value)

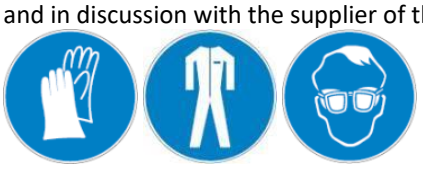
Romania	OEL TWA (Legal Basis:Gov. Dec. No 1.218)	19 mg/m³ (for gaseous or vapor phase chemicals, the limit value is expressed at 20°C and 101.3 kPa)
Romania	OEL TWA (Legal Basis:Gov. Dec. No 1.218)	2 ppm
Romania	OEL STEL (Legal Basis:Gov. Dec. No 1.218)	48 mg/m³ (for gaseous or vapor phase chemicals, the limit value is expressed at 20°C and 101.3 kPa)
Romania	OEL STEL (Legal Basis:Gov. Dec. No 1.218)	5 ppm
Slovakia	OEL TWA (Legal Basis:Gov. Decree 33/2018)	10 mg/m³
Slovakia	OEL TWA (Legal Basis:Gov. Decree 33/2018)	2 ppm
Slovakia	OEL STEL (Legal Basis:Gov. Decree 33/2018)	48 mg/m³
Slovenia	OEL TWA (Legal Basis:No. 79/19)	19 mg/m³
Slovenia	OEL TWA (Legal Basis:No. 79/19)	2 ppm
Slovenia	OEL STEL (Legal Basis:No. 79/19)	48 mg/m³
Slovenia	OEL STEL (Legal Basis:No. 79/19)	5 ppm
Spain	OEL TWA (Legal Basis:OELCAIS)	20 mg/m³
Spain	OEL TWA (Legal Basis:OELCAIS)	2 ppm
Spain	OEL STEL (Legal Basis:OELCAIS)	50 mg/m³
Spain	OEL STEL (Legal Basis:OELCAIS)	5 ppm
Sweden	OEL TLV (Legal Basis:AFS 2018:1)	19 mg/m³
Sweden	OEL TLV (Legal Basis:AFS 2018:1)	2 ppm
Sweden	OEL STEL (Legal Basis:AFS 2018:1)	48 mg/m³
Sweden	OEL STEL (Legal Basis:AFS 2018:1)	5 ppm
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	48 mg/m³ (all isomers)
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	5 ppm (all isomers)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	19 mg/m³ (all isomers)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	2 ppm (all isomers)

Terphenyls (26140-60-3)		
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	4,5 mg/m³ (all isomers)
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	0,5 ppm (all isomers)
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	4,5 mg/m³ (all isomers)
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	0,5 ppm (all isomers)
Austria	OEL Ceiling (Legal Basis:BGBl. II Nr. 254/2018)	4,5 mg/m³
Austria	OEL Ceiling (Legal Basis:BGBl. II Nr. 254/2018)	0,5 ppm
Belgium	OEL STEL (Legal Basis:Royal Decree 21/01/2020)	5 mg/m³
Belgium	OEL STEL (Legal Basis:Royal Decree 21/01/2020)	0,53 ppm
Croatia	OEL STEL (Legal Basis:OG No. 91/2018)	4,8 mg/m³
Croatia	OEL STEL (Legal Basis:OG No. 91/2018)	0,5 ppm
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	5 mg/m³ (Terphenyls)
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	0,5 ppm (Terphenyls)
Denmark	OEL STEL (Legal Basis:BEK No. 698 of 28/05/2020)	10 mg/m³ (Terphenyls)
Denmark	OEL STEL (Legal Basis:BEK No. 698 of 28/05/2020)	1 ppm (Terphenyls)
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	10 mg/m³
Finland	OEL STEL (Legal Basis:HTP-ARVOT 2020)	30 mg/m³
France	OEL STEL (Legal Basis:INRS ED 984)	5 mg/m³
France	OEL STEL (Legal Basis:INRS ED 984)	0,5 ppm
Greece	OEL TWA (Legal Basis:PWHSE)	5 mg/m³
Greece	OEL TWA (Legal Basis:PWHSE)	0,5 ppm
Greece	OEL STEL (Legal Basis:PWHSE)	5 mg/m³
Greece	OEL STEL (Legal Basis:PWHSE)	0,5 ppm
Ireland	OEL STEL (Legal Basis:2020 COP)	5 mg/m³ (inhalable fraction and vapour)
Ireland	OEL STEL (Legal Basis:2020 COP)	0,5 ppm
USA ACGIH	OEL Ceiling (Legal Basis:IMDFN1)	5 mg/m³
Norway	OEL Ceiling (Legal Basis:FOR-2020-04-06-695)	4,5 mg/m³
Norway	OEL Ceiling (Legal Basis:FOR-2020-04-06-695)	0,5 ppm
Portugal	OEL Ceiling (Legal Basis:Portuguese Norm NP 1796:2014)	5 mg/m³
Spain	OEL STEL (Legal Basis:OELCAIS)	5 mg/m³
Spain	OEL STEL (Legal Basis:OELCAIS)	0,52 ppm
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	5 mg/m³
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	0,5 ppm

8.2. Exposure Controls

Appropriate Engineering Controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment : Gloves. Protective clothing. Protective goggles. Personal protective equipment should be chosen in accordance with Regulation (EU) 2016/425, CEN standards, and in discussion with the supplier of the protective equipment.



Materials for Protective Clothing : Chemically resistant materials and fabrics.

Hand Protection : Wear protective gloves.

Eye Protection : Chemical safety goggles.

Skin and Body Protection : Wear suitable protective clothing.

Respiratory Protection : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Colour, Appearance	: Light Yellow
Odour	: Characteristic Odour
Odour Threshold	: No data available
pH	: No data available
Evaporation Rate	: No data available
Melting Point	: 4 °C
Freezing Point	: No data available
Boiling Point	: ≥ 181 °C
Flash Point	: > 110 °C (Open Cup)
Auto-Ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability	: Not applicable
Vapour Pressure	: ≤ 200 Pa (≤ 1,5 mm Hg)
Relative Vapour Density At 20°C	: >1,0 (air = 1)
Relative Density	: 3,06 (water = 1)
Solubility	: Water: Practically insoluble
Partition Coefficient n-Octanol/Water	: No data available
Viscosity	: 4cSt @ 25 °C
Explosive Properties	: No data available
Oxidising Properties	: No data available
Explosive Limits	: No data available
Particle Aspect Ratio	: Not applicable
Particle Aggregation State	: Not applicable
Particle Agglomeration State	: Not applicable
Particle Specific Surface Area	: Not applicable
Particle Dustiness	: Not applicable

9.2. Other Information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions
Hazardous polymerisation will not occur.

10.4. Conditions to Avoid
Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials
Strong acids, strong bases, strong oxidisers.

10.6. Hazardous Decomposition Products
Thermal decomposition may produce: Carbon oxides (CO, CO_2). Halogenated compounds. Irritating or toxic vapors.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Hazard Classes As Defined In Regulation (EC) No 1272/2008

Likely Routes of Exposure : Dermal, Eye Contact, Inhalation, Oral
Acute Toxicity (Oral) : Harmful if swallowed.
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)

Cargille Refractive Index Liquid Series M n_D = 1,701 - 1,735	
ATE CLP (oral)	1.000,00 mg/kg bodyweight

Hydrogenated terphenyls (61788-32-7)	
LD50 Oral Rat	> 10000 mg/kg (Source: EPA_HPV)
LD50 Dermal Rabbit	> 2000 mg/kg (Source: ECHA_API)
LC50 Inhalation Rat	> 4,7 mg/l/4h

Terphenyls (26140-60-3)	
LD50 Oral Rat	> 5000 mg/kg (Source: EPA_HPV)
LD50 Dermal Rabbit	> 5000 mg/kg (Source: ECHA_API)
LC50 Inhalation Rat	> 3,8 mg/l/4h

Methylene iodide (75-11-6)	
ATE CLP (oral)	500,00 mg/kg bodyweight

Skin Corrosion/Irritation : Causes skin irritation.
Eye Damage/Irritation : Causes serious eye damage.
Respiratory or Skin Sensitisation : Not classified. (Based on available data, the classification criteria are not met)
Germ Cell Mutagenicity : Not classified. (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified. (Based on available data, the classification criteria are not met)
Reproductive Toxicity : Not classified. (Based on available data, the classification criteria are not met)
Specific Target Organ Toxicity (Single Exposure) : May cause respiratory irritation.
Specific Target Organ Toxicity (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)
Symptoms/Injuries After Inhalation : Irritation of the respiratory tract and the other mucous membranes.
Symptoms/Injuries After Skin Contact : Redness, pain, swelling, itching, burning, dryness, and dermatitis.
Symptoms/Injuries After Eye Contact : Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Injuries After Ingestion : This material is harmful orally and can cause adverse health effects or death in significant amounts.
Chronic Symptoms : None known.

11.2. Information On Other Hazards
Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to humans as it does not meet the criteria set out in section A of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Hazardous To The Aquatic Environment, Short–Term (Acute) : Very toxic to aquatic life.
Hazardous To The Aquatic Environment, Long–Term (Chronic) : Very toxic to aquatic life with long lasting effects.

Hydrogenated terphenyls (61788-32-7)	
LC50 - Fish [1]	> 0,53 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: IUCLID)

EC50 - Crustacea [1]	> 1,34 mg/l
LC50 - Fish [2]	> 0,53 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: IUCLID)

Terphenyls (26140-60-3)	
LC50 - Fish [1]	> 0,11 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 - Crustacea [1]	0,04 mg/l (Exposure time: 48 h - Species: Daphnia magna) Data Specific to o-Terphenyl.
LC50 - Fish [2]	> 0,11 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 - Crustacea [2]	0,02 mg/l (Exposure time: 48 h - Species: Daphnia magna) Data Specific to m-Terphenyl.
NOEC chronic fish	0,04 mg/l (Duration: 34 d - Species: Pimephales promelas)

12.2. Persistence and Degradability

Cargille Refractive Index Liquid Series M n_D = 1,701 - 1,735	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

Cargille Refractive Index Liquid Series M n_D = 1,701 - 1,735	
Bioaccumulative Potential	Not established.

12.4. Mobility in Soil

No additional information available

12.5. Results of PBT and vPvB Assessment

Component	
Hydrogenated terphenyls (61788-32-7)	This substance meets the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine Disrupting Properties

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

12.7. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Sewage Disposal Recommendations : Do not dispose of waste into sewer. Do not empty into drains.

Product/Packaging Disposal Recommendations : Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information : Container may remain hazardous when empty. Continue to observe all precautions.

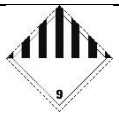
Ecology - Waste Materials : Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

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

ADR	IMDG	IATA	ADN	RID
14.1. UN Number or ID Number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN Proper Shipping Name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS TERPHENYLS)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS TERPHENYLS)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS TERPHENYLS)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS TERPHENYLS)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS TERPHENYLS)
14.3. Transport Hazard Class(es)				
9	9	9	9	9

ADR	IMDG	IATA	ADN	RID
				
14.4. Packing Group				
III	III	III	III	III
14.5. Environmental Hazards				
Dangerous for the environment : Yes Not regulated when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less. (See special provision 375)	Dangerous for the environment : Yes Marine pollutant : Yes Not regulated when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less. (See 2.10.2.7)	Dangerous for the environment : Yes Not regulated when carried in single or combination packaging containing a net quantity of 5 L or less. (see special provision A197)	Dangerous for the environment : Yes Not regulated when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less. (See special provision 375)	Dangerous for the environment : Yes Not regulated when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less. (See special provision 375)

14.6. Special Precautions For User

No additional information available

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

15.1.1. EU-Regulations

15.1.1.1. REACH Annex XVII Information

Listed on REACH Annex XVII (Restriction Conditions). The following restrictions are applicable:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Cargille Refractive Index Liquid Series M n_D = 1,701 - 1,735 ; Methylene iodide
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	Cargille Refractive Index Liquid Series M n_D = 1,701 - 1,735 ; Hydrogenated terphenyls ; Terphenyls

15.1.1.2. REACH Candidate List Information

Contains substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: Terphenyl, hydrogenated (EC 262-967-7, CAS 61788-32-7)

15.1.1.3. POP (2019/1021) - Persistent Organic Pollutants Information

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

15.1.1.4. PIC Regulation EU (649/2012) - Export and Import of Hazardous Chemicals Information

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

15.1.1.5. REACH Annex XIV Information

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

15.1.1.6. Substances Depleting the Ozone layer (1005/2009) Information

No additional information available

15.1.1.7. EC Inventory Information

Hydrogenated terphenyls (61788-32-7)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Polyphenyls, quater- and higher, partially hydrogenated (68956-74-1)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Terphenyls (26140-60-3)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Methylene iodide (75-11-6)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.1.1.8. Other Information

No additional information available

15.1.2. National Regulations

No additional information available

15.1.3. International Inventory Lists

Hydrogenated terphenyls (61788-32-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)
Listed on Thailand Existing Chemicals Inventory (DIW)

Polyphenyls, quater- and higher, partially hydrogenated (68956-74-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

Terphenyls (26140-60-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)
Listed on Thailand Existing Chemicals Inventory (DIW)

Methylene iodide (75-11-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Date of Preparation or Latest Revision	:	14/05/2024
Data Sources	:	Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.
Other Information	:	According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full Text of H- and EUH-statements:

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
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Classification and Procedure Used to Derive the Classification for Mixtures According to Regulation (EC) 1272/2008 [CLP]:

Acute Tox. 4 (Oral)	Calculation method
Skin Irrit. 2	Calculation method
Eye Dam. 1	Calculation method
STOT SE 3	Calculation method
Aquatic Acute 1	Calculation method
Aquatic Chronic 1	Calculation method

Indication of Changes

Review of data section 9. Modified language section 4,5,6,and 7.

Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists
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
BEI - Biological Exposure Indices (BEI)
BOD – Biochemical Oxygen Demand
CAS No. - Chemical Abstracts Service Number
CLP – Classification, Labeling and Packaging Regulation (EC) No 1272/2008
COD – Chemical Oxygen Demand
EC – European Community
EC50 - Median Effective Concentration
EEC – European Economic Community
EINECS – European Inventory of Existing Commercial Chemical Substances
EmS-No. (Fire) - IMDG Emergency Schedule Fire
EmS-No. (Spillage) - IMDG Emergency Schedule Spillage
EU – European Union
ErC50 - EC50 in Terms of Reduction Growth Rate
GHS – Globally Harmonized System of Classification and Labeling of Chemicals
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IBC Code - International Bulk Chemical Code
IMDG - International Maritime Dangerous Goods
IPRV - Ilgalaikio Poveikio Ribinis Dydis
IOELV – Indicative Occupational Exposure Limit Value
LC50 - Median Lethal Concentration
LD50 - Median Lethal Dose
LOAEL - Lowest Observed Adverse Effect Level
LOEC - Lowest-Observed-Effect Concentration
Log Koc - Soil Organic Carbon-water Partitioning Coefficient
Log Kow - Octanol/water Partition Coefficient
Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water
MAK – Maximum Workplace Concentration/Maximum Permissible Concentration
MARPOL - International Convention for the Prevention of Pollution
NDS - Najwyzsze Dopuszczalne Stezenie
NDSCh - Najwyzsze Dopuszczalne Stezenie Chwilowe
NDSP - Najwyzsze Dopuszczalne Stezenie Pulapowe
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
NRD - Nevirsytinas Ribinis Dydis
NTP – National Toxicology Program
OEL - Occupational Exposure Limits
PBT - Persistent, Bioaccumulative and Toxic
PEL - Permissible Exposure Limit
pH – Potential Hydrogen
REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals
RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail
SADT - Self Accelerating Decomposition Temperature
SDS - Safety Data Sheet
STEL - Short Term Exposure Limit
STOT - Specific Target Organ Toxicity
TA-Luft - Technische Anleitung zur Reinhaltung der Luft
TEL TRK – Technical Guidance Concentrations
ThOD – Theoretical Oxygen Demand
TLM - Median Tolerance Limit
TLV - Threshold Limit Value
TPRD - Trumpalaikio Poveikio Ribinis Dydis
TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von Gefahrstoffen in ortsbeweglichen Behältern
TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine
TRGS 900 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte
TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
VOC – Volatile Organic Compounds
VLA-EC - Valor Límite Ambiental Exposición de Corta Duración
VLA-ED - Valor Límite Ambiental Exposición Diaria
VLE – Valeur Limite D'exposition
VME – Valeur Limite De Moyenne Exposition
vPvB - Very Persistent and Very Bioaccumulative
WEL – Workplace Exposure Limit
WGK - Wassergefährdungsklasse

Glossary of Data Source Abbreviations

ATSDR: Agency for Toxic Substances and Disease Registry (U.S. Department of Health and Human Services)
AU_WES: Australia WES
FOOD_JOURN: Food Research Journal (1956)
IARC: The International Agency for Research on Cancer
IDLH: National Institute for Occupational Health and Safety Immediately

CHEMVIEW: ChemView (U.S. Environmental Protection Agency)
EC_RAR: European Commission Renewal Assessment Report
EC_SCOEL: European Commission Scientific Committee on Occupational Exposure Limits
ECETOC: European Centre for Ecotoxicology and Toxicology of Chemicals Reports
ECHA_API: European Chemicals Agency API
ECHA_RAC: ECHA Committee for Risk Assessment
EFSA: European Food Safety Authority
EPA: U.S. Environmental Protection Agency
EPA_AEGL: Acute Exposure Guideline Levels (U.S. Environmental Protection Agency)
EPA_FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act Reregistration Eligibility Decision (U.S. Environmental Protection Agency)
EPA_HPV: High Production Volume Chemicals (U.S. Environmental Protection Agency)
EPA_TRED: Risk Assessment for Tolerance Reassessment Eligibility Decision (U.S. Environmental Protection Agency)
EU_CLH: European Union Harmonised Classification and Labelling Proposal
EU_RAR: European Union Risk Assessment Report
Dangerous to Life or Health Value Profiles
IUCLID: International Uniform Chemical Information Database
JAPAN_GHS: Japan GHS Basis for Classification Data
JP_J-CHECK: Japan J-Check
KR_NIER: South Korea National Institute of Environmental Research Evaluations
NICNAS: Australia National Industrial Chemicals Notification and Assessment Scheme
NIOSH: National Institute for Occupational Health and Safety (U.S. Department of Health and Human Services)
NLM_CIP: National Library of Medicine ChemID plus database
NLM_HSDB: National Library of Medicine Hazardous Substance Data Bank
NLM_PUBMED: National Library of Medicine PubMed database
NTP: National Toxicology Program
NZ_CCID: New Zealand Chemical Classification and Information Database
OECD_EHSP: Environment, Health, and Safety Publication (Organisation for Economic Co-operation and Development)
OECD_SIDS: Screening Information Data Sets (Organisation for Economic Co-operation and Development)
WHO: World Health Organization

Limit Value Legal Basis*

*Includes the below and any related regulations/provisions, and subsequent amendements

EU - 2019/1831 EU in accor. with 98/24/EC - Directive 2019/1831/EU of October 24, 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 2000/39/EC.

EU - 2019/1243/EU, and 98/24/EC) - Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work and amendment Regulation (EU) 2019/1243.

Austria - BGBl. II Nr. 254/2018 - Ordinance on Limit Values for Workplace Substances and on Carcinogens from the Federal Ministry of Economics and Labour, Published in 2003, Appendix 1: Substance List, Published through: Ministry of Economics and Labour of the Republic of Austria amended through the Government Gazette II (BGBL. II) No 119/2004) & BGBl. II No. 242/2006, BGBl. II No. 243/2007, lastly changed through BGBl. I Nr. 51/2011), BGBl. II Nr. 186/2015, BGBl. II Nr. 288/2017 amended by BGBl. II Nr. 254/2018.

Austria - BLV BGBl. II Nr. 254/2018 - Ordinance on health monitoring at the workplace 2008, published through BGBl. II Nr. 224/2007 by Austria Minister for Labor and Social Affairs, Lastly changed through BGBl. II Nr. 254/2018

Belgium - Royal Decree 21/01/2020 - Royal decree amending title 1 relating to chemical agents in Book VI of the code of well-being at work, with regard to the list of limit values of exposure to chemical agents and title 2 relating to carcinogens, mutagens and reprotoxics of Book VI of the code of well-being at work (1)

Bulgaria - Reg. No. 13/10 -
Regulation No. 13 of December 30, 2003 on the Protection of Workers from Hazards Related to Exposure to Chemical Agents at Work Labor Code, Annex No.1 Limit values of chemical agents in the air of the working environment, and Annex № 2 Biological limit values of chemical agents and their metabolites (bio markers of exposure) or bio markers of effect Amended by: 71/2006, 67/2007, 2/2012, 46/2015, 73/2018, 5/2020), and Regulation No.10 of September 26, 2003 on the Protection of Workers from the Risks Associated with Exposure to Carcinogens and Mutagens at Work Annex No.1 Occupational Exposure Limits, Amended by: 8/2004, 46/2015, 5/2020

Croatia - OG No. 91/2018 - Regulation on the Protection of Workers from Exposure to Hazardous Chemicals at Work, the Limit Values of Exposure and the Biological Limit Values. Official Gazette No. 91 of October 12, 2018

Cyprus - KDP 16/2019 - Government of Cyprus Cabinet of Ministers Regulation 268/2001 - Safety and Health in the Working Environment (Chemical Substances) Article 38, As amended by Regulation 16/2019 and Cabinet of Ministers Regulation 153/2001 - Safety and Health in the Working Environment (Chemical Substances-Carcinogens), as amended by Regulation 493/2004 - Safety and Health in the Working Environment (Chemical Substances - Carcinogens) AND Law 47(I) 2000 - Occupational Health and Safety (Asbestos), as amended by Decree 316/2006.

Czech Republic - Reg. 41/2020 - Regulation 41/2020 amending Regulation 361/2007 of Coll. establishing Occupation Exposure Limits as amended

Czech Republic - Decree No. 107/2013 - Decree No. 107/2013 Coll., amending Decree No. 432/2003 Coll., laying down the conditions for the application of the work into categories, limit values for the parameters of

Greece - PWHSE - Occupational Exposure Limits - Protection of workers' health and safety from exposure to certain chemical substances during the workday, (latest amendment 82/2018) and Occupation Exposure Limits - Protection of workers' health and safety from exposure to certain carcinogenic and mutagenic chemical substances (latest amendment 26/2020), and Presidential Decree 212/2006 - Protection of workers that are exposed to asbestos.

Hungary - Decree 05/2020 - 5/2020. (II. 6.) ITM decree on the protection of the health and safety of workers from the risks related to chemical agents

Ireland - 2020 COP - 2020 Code of Practice for the Chemical Agents Regulations, Schedule 1

Italy - Decree 81 - Title IX, Annex XLIII and XXXVIII, Professional Exposure Limits and Annex XXXIX Mandatory Biological Limit Values and Health Monitoring, Article 1, Law 123 of August 3, 2007, Legislative Decree 81 of April 9, 2008, Last amended: January 2020

Italy - IMDFN1 - Ministerial Decree of August 20, 1999 Final Note (1)

Latvia - Reg. No. 325 - Cabinet of Ministers Regulation No. 325 - Labour Protection Requirements when Coming in Contact with Chemical Substances at Workplaces, Amended by Cabinet of Ministers Regulation No. 92, 163, 407 and No. 11.

Lithuania - HN 23:2011 - Lithuanian Hygiene Standard HN 23:2011 Occupational Exposure Limit Values, Amended by Order V-695/A1-272.

Luxembourg - A-N 684 - Grand-Ducal Regulation of 20 July 2018 amending the Grand-Ducal Regulation of 14 November 2016 concerning the protection of the safety and health of employees against the risks associated with chemical agents in the workplace. Official journal of the Grand-Duke of Luxembourg, A-N°684 of 2018

Malta - MOSHAA Ch. 424 - Malta Occupational Health and Safety Authority Act: Chapter 424 as amended by: Legal Notice 353, 53, 198, and 57.

Netherlands- OWCRLV - Occupational Working Conditions Regulation, Limit Values for substances harmful to health, Annex XVIII, Updated from August 1, 2020.

Norway - FOR-2020-04-060695 - Regulations concerning action and limit values for physical and chemical agents in the working environment and classified biological agents, FOR-2011-12-06-1358, Updated by: FOR-2020-04-06-695, FOR-2020-03-23-402, FOR-2018-12-20-2186, FOR-2018-08-21-1255, FOR-2017-12-20-2353.

Poland - Dz. U. 2020 Nr. 61 - Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the Highest Allowable Concentrations and Intensities of Factors Harmful to Health in the Work Environment Dz.U. 2018 Nr. 1286 of June 12, 2018, Annex 1 - List of values of the highest permissible chemical concentrations and dust factors harmful to health in the work environment, amended by: Dz. U. 2020 Nr. 61.

Portugal - Portuguese Norm NP 1796:2014 - Occupational exposure limits and biological exposure indices to chemical agents. Table 1 - Occupational exposure limits and biological exposure indices to chemical agents (OELs), Law Decree 35/2020.

Romania - Gov. Dec. No 1.218 - Governmental Decision No. 1.218 from 06/09/2006 on the minimum health and safety requirements for protection

biological exposure tests, collection of biological material conditions for the implementation of biological exposure tests and requirements for reporting work with asbestos and biological agents

Denmark - BEK No. 698 of 28/05/2020 - Order on Limit Values for Substances and Materials, The Statutory Order No. 507 of May 17, 2011, Appendix 1 - Limits for air pollution, etc. and Appendix 3 - Biological Exposure Values, Amended by: No. 986 of October 11, 2012, No. 655 of May 31, 2018, No. 1458 December 13, 2019, No. 698 of May 28, 2020

Estonia - Regulation No. 105 - Health and Safety Requirements for the Use of Dangerous Chemicals and Materials Containing Them and Occupational Exposure Limits to Chemical Agents
Government of the Republic, Regulation No. 105 of 20 March 2001, Amended 17 October 2019, and 17 January, 2020.

Finland - HTP-ARVOT 2020 - Concentrations Known to be Hazardous, 654/2020 OEL values 2020 Publications of Ministry of Social Affairs and Health 2020:24 Annexes1, 2 and 3.

France - INRS ED 984 - Occupational Exposure Limit Values to Chemical Agents in France Published 2016 by the INRS National Institute of Research and Safety Health and safety of work, revised, updated by: Decree 2016-344, JORF No 0119, and Decree 2019-1487.

France - Decree 2009-1570 - Decree 2009-1570 of December 15, 2009, relative to the control of chemical risk on workplaces.

Germany - TRGS 900 - Occupational Exposure Limits, Technical Rules for Dangerous Substances, latest amendment March, 2020

Germany - TRGS 903 - Biological Threshold Limits (BGW-Values), Technical Rules for Dangerous Substances, latest amendment March, 2020

Gibraltar - LN. 2018/131 - Factories (Control of Chemical Agents at Work) Regulations 2003 LN. 2003/035, amended by LN. 2008/035, LN. 2008/050, LN. 2012/021, LN. 2015/143, LN. 2018/181.

of workers from the risks related to exposure to chemical agents, Annex No. 1 Mandatory National Occupational Exposure Limit Values for Chemical Agents. Amended by Decision no. 157, 584, 359, and 1.

Slovakia - Gov. Decree 33/2018 - Government Decree of Slovak Republic 33/2018 on January 17, 2018 amending Government Decree of Slovak Republic 355/2006 about protection of health of employees when working with chemical agents

Slovenia - No. 79/19 - Regulation for protection of workers against risks related to carcinogenic or mutagenic substances exposure. Annex III - Classification and binding levels of carcinogenic or mutagenic substances for occupational exposure. The Official Journal of the Republic of Slovenia, No. 101/2005. Amended by 38/15, 79/19. Regulation for protection of workers against risks related to exposure to chemical substances at the workplace. Republic of Slovenia, No. 100/2001 . Annex I - List of Binding Occupational Exposure Limit Values. Amended by 39/05, 53/07, 102/10, 38/15, 78/18, 78/19

Spain - AFS 2018:1 - NATIONAL INSTITUTE FOR HEALTH AND SAFETY AT WORK. Occupational exposure limits for chemical agents in Spain. Tables 1 and 3. Latest edition Feb. 2019

Sweden - AFS 2018:1 - Statute Book of the Swedish Work Environment Authority, AFS 2018:1
The Swedish Work Environment Authority's Ordinance and General Guidance on Hygienic Limit Values

Switzerland - OLVSNAIF - Occupational Limit Values 2020 Swiss National Accident Insurance Fund. List of Biological Limit Values (BAT-Werte) and List of MAK Values.

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