Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Product name **CANDELA - GEMMA**
UFI: **7H50-C078-J00R-0A65**

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

Identified Uses	Industrial	Professional	Consumer
Perfumed candle for environments.	-	-	✔

Uses Advised Against

Do not use as a perfume per person.

1.3. Details of the supplier of the safety data sheet

Name **CULTI MILANO S.p.A.**
Full address **Via dell'Aprica, 12**
District and Country **20158 Milano (MI)**
Italia

tel. +39 02/49784974
fax +39 02/49789135

e-mail address of the competent person responsible for the Safety Data Sheet **culti@culti.com**

1.4. Emergency telephone number

For urgent inquiries refer to

(AT): +43 14064343 - (BE): +32 070245245 - (BG): +359 29154233 - (CY): 1401
(DK): +45 82121212 - (ES): +34 915620420 - (HR): +385 12348342
(EE): +372 7943794, 16662 - (FI): +358 800 147111 - (FR): +33 (0) 145425959
(DE): 112 - (EL): +30 2107793777 - (IE): +353 (01) 8092166 - (IS): +354 5432222, 112
(LV): +371 67042473, 112 - (LT): +370 (85) 2362052 - (LU): +352 80025500
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(PT): +351 800250250 - (CZ): +420 224919293 - (RO): +40 212308000
(SK): +421 254774166 - (SI): 112 - (SE): 112 - (HU):+36 80201199

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Skin sensitization, category 1B	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Warning

Hazard statements:

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P280	Wear protective gloves.
P102	Keep out of reach of children.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P101	If medical advice is needed, have product container or label at hand.
P273	Avoid release to the environment.

Contains: 2-ACETOXY-2,3,8,8-TETRAMETHYLOCTAHYDRONAPHTHALENE
COUMARIN
ACETYL DIISOAMYLENE
LINALOOL

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.
The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	**x = Conc. %**	**Classification (EC) 1272/2008 (CLP)**
2-ACETOXY-2,3,8,8-TETRAMETHYLOCTAHYDRONAPHTHALENE		
INDEX -	0,5 ≤ x < 2	Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Chronic 2 H411
EC 915-730-3		
CAS -		
REACH Reg. 01-2119489989-04		
LINALOOL		
INDEX 603-235-00-2	0,25 ≤ x < 1	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317
EC 201-134-4		

CAS 78-70-6

REACH Reg. 01-2119474016-42

ACETYL DIISOAMYLENE

INDEX -	0,25 ≤ x < 0,5	Skin Sens. 1B H317, Aquatic Chronic 2 H411
EC 946-245-5		
CAS -		
REACH Reg. 01-2119980043-42		
COUMARIN		
INDEX -	0,1 ≤ x < 0,25	Acute Tox. 4 H302, Skin Sens. 1B H317
EC 202-086-7		LD50 Oral: 520 mg/kg
CAS 91-64-5		
α-CEDRENE		
INDEX -	0,025 ≤ x < 0,1	Asp. Tox. 1 H304, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=10
EC 207-418-4		
CAS 469-61-4		
β-CEDRENE		
INDEX -	0,025 ≤ x < 0,1	Asp. Tox. 1 H304, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=10
EC 208-898-8		
CAS 546-28-1		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.
INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

If there are no contraindications, spray powder with water to prevent the formation of dust.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.
Make sure the leakage site is well aired. Evaluate the compatibility of the container to be used, by checking section 10. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

LINALOOL

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,2	mg/l
Normal value in marine water	0,02	mg/l
Normal value for fresh water sediment	2,22	mg/kg/d
Normal value for marine water sediment	0,222	mg/kg/d
Normal value for marine water, intermittent release	2	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	7,8	mg/kg
Normal value for the terrestrial compartment	0,327	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				2,49 mg/kg bw/d				
Inhalation				4,33 mg/m3				24,58 mg/m3
Skin	1,5 mg/cm2		1,5 mg/cm2	1,25 mg/kg bw/d	3 mg/cm2		3 mg/cm2	3,5 mg/kg bw/d

COUMARIN

Predicted no-effect concentration - PNEC		
Normal value in fresh water	19	µg/l
Normal value in marine water	1,9	µg/l
Normal value for fresh water sediment	0,15	mg/kg/d
Normal value for marine water sediment	0,015	mg/kg/d
Normal value for marine water, intermittent release	14,2	µg/l
Normal value of STP microorganisms	6,4	mg/l
Normal value for the food chain (secondary poisoning)	30,7	mg/kg
Normal value for the terrestrial compartment	0,018	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,39 mg/kg bw/d				
Inhalation				1,69 mg/m3				6,78 mg/m3
Skin				0,39 mg/kg bw/d				0,79 mg/kg bw/d

2-ACETOXY-2,3,8,8-TETRAMETHYLOCTAHYDRONAPHTHALENE

Predicted no-effect concentration - PNEC		
Normal value in fresh water	4,4	µg/l
Normal value in marine water	0,44	µg/l
Normal value for fresh water sediment	3,73	mg/kg/d
Normal value for marine water sediment	0,75	mg/kg/d

Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	26,7	mg/kg
Normal value for the terrestrial compartment	2,7	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				3 mg/kg bw/d				
Inhalation				9 mg/m3				30 mg/m3
Skin			380 µg/cm2	17,2 mg/kg bw/d			648 µg/cm2	28,7 mg/kg bw/d

ACETYL DIISOAMYLENE

Predicted no-effect concentration - PNEC

Normal value in fresh water	9,6	µg/l
Normal value in marine water	0,96	µg/l
Normal value for fresh water sediment	1,24	mg/kg/d
Normal value for marine water sediment	0,124	mg/kg/d
Normal value of STP microorganisms	22	mg/l
Normal value for the terrestrial compartment	0,243	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1 mg/kg bw/d				
Inhalation				1,8 mg/m3				6 mg/m3
Skin			2100 µg/cm2	1 mg/kg bw/d			3600 µg/cm2	1,7 mg/kg bw/d

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION
In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).
Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
None required, unless indicated otherwise in the chemical risk assessment.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	wax	
Colour	white	
Odour	characteristic	
Melting point / freezing point	not available	Reason for missing data:not relevant for the characterization of the product
Initial boiling point	not available	Reason for missing data:not relevant for the characterization of the product
Flammability	not flammable	
Lower explosive limit	not applicable	Reason for missing data:The substance/mixture is a solid
Upper explosive limit	not applicable	Reason for missing data:The substance/mixture is a solid
Flash point	not applicable	Reason for missing data:The substance/mixture is a solid
Auto-ignition temperature	not applicable	Reason for missing data:The substance/mixture is a solid
Decomposition temperature	not available	Reason for missing data:not relevant for the characterization of the product
pH	not available	Reason for missing data:substance/mixture is non-soluble (in water)
Kinematic viscosity	not applicable	Reason for missing data:The substance/mixture is a solid
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	not applicable	Reason for missing data:substance/mixture is non-soluble (in water)
Vapour pressure	not available	Reason for missing data:not relevant for the characterization of the product
Density and/or relative density	not available	Reason for missing data:not relevant for the characterization of the product
Relative vapour density	not applicable	Reason for missing data:The substance/mixture is a solid
Particle characteristics	not available	Reason for missing data:not relevant for the characterization of the product

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information
Information not available

Information on likely routes of exposure
Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Information not available

Interactive effects
Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

LINALOOL

LD50 (Dermal):	5610 mg/kg OECD 402
LD50 (Oral):	2790 mg/kg OECD 401
LC50 (Inhalation vapours):	> 3,2 mg/l/1h

COUMARIN

LD50 (Oral):	520 mg/kg OECD 401

2-ACETOXY-2,3,8,8-TETRAMETHYLOCTAHYDRONAPHTHALENE

LD50 (Dermal):	> 5000 mg/kg OECD 402
LD50 (Oral):	> 5000 mg/kg OECD 401

ACETYL DIISOAMYLENE

LD50 (Dermal):	> 5000 mg/kg OECD 402
LD50 (Oral):	2350 mg/kg OECD 401

SKIN CORROSION / IRRITATION
Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION
Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION
Sensitising for the skin

GERM CELL MUTAGENICITY
Does not meet the classification criteria for this hazard class

CARCINOGENICITY
Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY
Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE
Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE
Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD
Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

LINALOOL

LC50 - for Fish	27,8 mg/l/96h OECD 203

EC50 - for Crustacea	59 mg/l/48h OECD 202
EC50 - for Algae / Aquatic Plants	156,7 mg/l/72h
EC10 for Algae / Aquatic Plants	54,3 mg/l/4d

COUMARIN

LC50 - for Fish	37,62 mg/l/96h
EC50 - for Crustacea	82,39 mg/l/48h
EC50 - for Algae / Aquatic Plants	37,88 mg/l/72h

2-ACETOXY-2,3,8,8-TETRAMETHYLOCTAHYDRONAPHTHALENE

LC50 - for Fish	1,3 mg/l/96h OECD 203
EC50 - for Crustacea	1,38 mg/l/48h OECD 202
EC50 - for Algae / Aquatic Plants	2,6 mg/l/72h OECD 201
EC10 for Crustacea	0,044 mg/l/21d OECD 211
EC10 for Algae / Aquatic Plants	2,6 mg/l/72h OECD 201
Chronic NOEC for Fish	0,16 mg/l OECD 210

ACETYL DIISOAMYLENE

LC50 - for Fish	4,8 mg/l/96h OECD 203
EC50 - for Crustacea	6,1 mg/l/48h OECD 202
EC50 - for Algae / Aquatic Plants	21 mg/l/72h OECD 201
EC10 for Algae / Aquatic Plants	12 mg/l/72h OECD 201

12.2. Persistence and degradability

LINALOOL

Rapidly degradable
64% / 28d OECD 301

COUMARIN
Rapidly degradable
90% / 28d OECD 301 F

2-ACETOXY-2,3,8,8-TETRAMETHYLOCTAHYDRONAPHTHALENE
Rapidly degradable
96,3% / 28d OECD 301 F

ACETYL DIISOAMYLENE
NOT rapidly degradable
0% / 28d, OECD 301D

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number

not applicable

14.2. UN proper shipping name

not applicable

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

14.5. Environmental hazards

not applicable

14.6. Special precautions for user

not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product
Point 40

Contained substance
Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2

Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
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.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament

12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.
CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.