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

1.1 Product identifier

Product name:	TK7
Commercial code:	40.007
UFI code:	YSSJ-X3U7-900W-TK53

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

Recommended use:
Unblocking, penetrating (aerosol)
Uses advised against:
Relevant uses are listed above. No other uses are recommended.

1.3 Details of the supplier of the safety data sheet

Company name:	Silpar TK snc
Address:	Via Rosa Luxemburg 12/14 10093 - Collegno (TO)
Telephone:	+39 011 7791177
Fax:	+39 011 7791177
Email:	sicurezza@silpartkline.com

1.4 Emergency telephone number

CAVp "Osp. Pediatrico Bambino Gesù - Roma	Tel. +39 06 68593726
Az. Osp. Univ. Foggia	Tel. +39 0881 732326
Az. Osp. "A. Cardarelli" – Napoli	Tel. +39 081 7472870
CAV Policlinico "Umberto I" – Roma	Tel. +39 06 49978000
CAV Policlinico "A. Gemelli" – Roma	Tel. +39 06 3054343
Az. Osp. "Careggi" U.O. Tossicologia Medica – Firenze	Tel. +39 055 7947819
CAV Centro Nazionale di Informazione Tossicologica – Pavia	Tel. +39 0382 24444
Osp. Niguarda Ca' Granda – Milano	Tel. +39 02 66101029
Azienda Ospedaliera Papa Giovanni XXII – Bergamo	Tel. +39 800 883300
Azienda Ospedaliera Universitaria Integrata Verona	Tel. +39 800 011858

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Reg. EU n°1272/2008 [CLP]
Aerosols 1, H222+H229

2.2 Label elements

Hazard pictograms:

Signal word: Danger

Hazard statements: H222 Extremely flammable aerosol
H229 Pressurised container: May burst if heated

Precautionary statements:
P101 If medical advice is needed, have product container or label at hand
P102 Keep out of reach of children
P103 ("Read label before use

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P261 Avoid breathing dust/fume/gas/mist/ vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 ºC/122 ºF.
P501 Dispose of contents/container in accordance with local/regional/ national/international regulations.

Special provisions:
We decline any responsibility for damages resulting from improper use of the product.
Special provisions based on Annex XVII of REACH and subsequent adaptations:
Use reserved for professional users.

2.3 Other hazards

Substance vPvB: None - Substance PBT: None
Aerosol containers exposed to temperatures above 50°C can deform and burst and be projected a considerable distance. The vapors are heavier than air and can localize in confined spaces, spread to the ground and can form flammable and explosive mixtures with air in the event of ignition even remotely, with consequent risk of fire. The aerosol contains an asphyxiating gas; avoid the accumulation of vapors in large quantities in confined environments as it can cause asphyxiation due to lack of oxygen. Exposure to high concentrations of vapours, particularly in confined and inadequately ventilated environments, can cause irritation to the respiratory tract, nausea, malaise and dizziness.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

N.A.

3.2 Mixtures

1.CAS 2.N° EC 3.N° Index 4.N° REACH	Name	Weight (%)	Classification 1272/2008 (CLP)
1. Not Available 2. 926-141-6 3. Not Available 4. 01-2119456620-43-XXXX	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics	25-30	Asp. Tox. 1 H304 EUH066
1. 106-97-8 2. 203-448-7 3. 601-004-00-0 4. 01-2119474691-32 -XXXX	Butane	15-20	Flam. Gas 1 H220 Press. Gas H280
1. 74-98-6 2. 200-827-9 3. 601-003-00-5 4. 01-2119486944-21-XXXX	Propane	10-12.5	Flam. Gas 1 H220 Press. Gas H280
1. Not Available 2. 919-857-5 3. Not Available 4. 01-2119463258-33-XXXX	Hydrocarbons, C9-C11, nalkanes, isoalkanes, cyclic, <2% aromatics	7-10	Flam. Liq. 3 H226 Asp. Tox. 1 H304 STOT SE 3 H336 EUH066 DELCP(CLP)*
1. 75-28-5 2. 200-857-2 3. 601-004-00-0 4. 01-2119485395-27-XXXX	Isobutane	5-7	Flam. Gas 1 H220 Press. Gas H280
1. 124-17-4 2. 2004-685-9 3. 607-025-00-1 4. 01-2119475110-51-XXXX	2-(2-butoxyethoxy)ethyl acetate; diethyleneglycol(mono) butylene acetate	2-3	Substance with a workplace exposure limit set at Union level.

The full text of the H phrases is given in section 16 of the safety data sheet

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	In case of contact with the eyes, rinse them with water for an adequate amount of time and keeping the eyelids open, then immediately consult an ophthalmologist. Protect the uninjured eye.
Skin contact	Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
Ingestion	Do not under any circumstances induce vomiting. SEEK MEDICAL EXAMINATION IMMEDIATELY
Inhalation	Remove to open air. If unwell, contact a doctor.

4.2 Most important symptoms and effects, both acute and delayed

For symptoms and effects caused by the contained substances, see chap. 11.

4.3 Indication of any immediate medical attention and special treatment needed

In the event of an accident or discomfort, consult a doctor immediately (if possible show the instructions for use or the safety data sheet).

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
Extinguishing substances are: carbon dioxide, foam, chemical powder.
UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
In case of overheating, the aerosol containers can deform, burst and can be thrown a considerable distance. Wear a safety helmet before approaching the fire. Avoid breathing combustion products.

5.3 Advice for firefighters

Wear full fireproof protective equipment (Type EN 11611 or EN469), with compressed air breathing apparatus (Type EN 137), helmet with visor and neck protection (Type EN443), heat-resistant gloves (Type EN407).
Cool the containers hit by the fire with water spray to avoid overheating. Do not let extinguishing media enter sewers or water courses. If feasible from a safety point of view, move undamaged containers from the area of immediate danger. Collect the contaminated water used to extinguish the fire separately. Do not discharge it into the sewer system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For those not directly involved:
Eliminate any sources of ignition (cigarettes, flames, sparks, electricity, etc.) or heat from the area where the leak occurred and provide adequate ventilation. Evacuate the surrounding areas and prevent the entry of external and unprotected personnel. Notify emergency crews.
Stop the leak if there is no danger. Do not handle damaged containers or spilled product without first wearing appropriate protective equipment. Avoid breathing vapors or mist. For information relating to environmental and health risks, respiratory protection, ventilation and individual means of protection, refer to section 8.
For those directly involved:
Emergency workers are recommended to wear appropriate personal protective equipment as indicated in section 8.
Vapors are heavier than air and, in the event of spills, can accumulate in enclosed spaces and low areas where they can easily ignite. If the situation cannot be fully assessed or if there is a risk of oxygen deficiency, use only a self-contained breathing apparatus (Type EN137).

6.2 Environmental precautions

Prevent the product from spilling or entering drains or water courses. Spills or uncontrolled discharges into water courses should be reported immediately to the Environment Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference to other sections

Refer to sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Pressurized container. Do not pierce or burn even after use. Do not use in the presence of open flames or other sources of ignition. Not smoking. Avoid the accumulation of electrostatic charges. Do not vaporize on flames or incandescent bodies. Do not spray on hot surfaces.
USE ONLY IN A WELL-VENTILATED PLACE.
Vapors can ignite with explosion. Accumulation must therefore be avoided by keeping doors and windows open and ensuring good cross ventilation. The vapors are heavier than air and can accumulate on the ground and, without adequate ventilation, if triggered, they can catch fire even at a distance with the risk of backfire. Protect from sunlight.
Do not expose to temperatures exceeding 50 ° C / 122 ° F.
Avoid contact with skin and eyes, inhalation of vapors and mists.
Measures for environmental protection:
Minimize the release of the mixture into the air and the surrounding environment, avoiding accidental spills and keeping the product stored away from sewage drains.
Work hygiene precautions:
Contaminated clothing must be replaced before entering the dining areas. During work, do not eat, drink or smoke in the work areas. Wash your hands after using the product. Avoid contact with skin and eyes, inhalation of vapors and mists. Do not use empty containers before they have been cleaned. Before transferring operations, make sure that there are no incompatible residual materials in the containers. See also paragraph 8 for recommended protective devices.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:
Store in a well-ventilated place away from direct sunlight.
Recommended storage temperature: 15 ° C to 30 ° C.
Keep away from naked flames, sparks, heat sources and any source of combustion.
Keep the containers in an upright and safe position avoiding the possibility of falls or bumps.
Do not store the product in corridors and stairways. Store the product only in original and closed packaging, not puncture or open aerosol containers. Keep away from food, drink and feed.
Incompatible materials:
DO NOT store together with oxidizing, self-igniting, self-heating substances, organic peroxides, agents oxidants, pyrophoric liquids and solids, explosives. See also paragraph 10 below.
Indication for the premises:
Fresh and adequately ventilated. Avoid the accumulation of electrostatic charges.
Storage Classes:
Refer to section 15.1 for Storage Classes / Limits (Seveso III).

7.3 Specific end use(s)

See section 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics

TLV TWA - 1200 mg/m3
butane - CAS: 106-97-8
ACGIH - STEL: 1000 ppm - Notes: (EX) - CNS impair
propane - CAS: 74-98-6
ACGIH - Notes: (D, EX) - Asphyxia
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatics
TLV TWA - 197 ppm (1200 mg/m3)
isobutane - CAS: 75-28-5
ACGIH - STEL: 1000 ppm - Notes: (EX) - CNS impair
2-(2-butoxyethoxy)ethyl acetate; diethyleneglycol(mono)butyl ether acetate - CAS: 124-17-4

Derived No Effect Level (DNEL)
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatics
Industrial worker: 208 mg/kg - Consumer: 125 mg/kg - Exposure: Human dermal - Frequency: Long term, systemic effects - Notes: bw/day
Industrial worker: 871 mg/m3 - Consumer: 900 mg/m3 - Exposure: Human inhalation - Frequency: Long term, systemic effects
Consumer: 125 mg/kg - Exposure: Human Oral - Frequency: Long term, systemic effects - Notes: bw/day
2-(2-butoxyethoxy)ethyl acetate; diethyleneglycol(mono)butyl ether acetate - CAS: 124-17-4
Consumer: 7.9 mg/kg - Exposure: Human Oral - Frequency: Long term, systemic effects
Industrial worker: 100 mg/kg - Consumer: 60 mg/kg - Exposure: Human dermal - Frequency: Long term, systemic effects

PNEC exposure limit values
2-(2-butoxyethoxy)ethyl acetate; diethyleneglycol(mono)butyl ether acetate - CAS: 124-17-4
Target: Fresh water - Value: 0.108 mg/l
Target: Sea water - Value: 0.011 mg/l
Target: Freshwater sediments - Value: 0.8 mg/kg
Target: Seawater sediments - Value: 0.08 mg/kg
Target: Soil (agriculture) - Value: 0.29 mg/kg

Technical controls
Ensure adequate ventilation, especially in confined areas.
Make sure eye washers and showers are close to the workplace.
Use anti-exposure equipment
Provide an emergency exit.

8.2 Exposure controls

Hands protection	Protect hands with category work gloves (ref. Standard EN 374). For the final choice of the material of the work gloves it is necessary to consider: compatibility, degradation, breakage time and permeation. In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is not foreseeable. Gloves have a wear time that depends on the duration and method of use.
Respiratory protection	Concentration levels in the air should be kept below exposure limits. Respiratory protection is required when the concentration in the air exceeds the TLV: use EN149 FFP2 approved masks or Type EN140 half-face respirators with Filter Type EN143: A2 or full-face respirators EN136 (Filter Type EN143: A2).
Eye and face protection	Wear protective goggles (see standard EN 166).
Body and skin protection:	Wear clean antistatic clothing with consistent coverage and antistatic safety footwear for professional use of category S2 (Type EN20345). In case of prolonged contact, use protective clothing impermeable to this material: shirts, aprons or full coveralls (Type EN 340-EN13034).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Liquid under pressure
Colour:	Colorless
Odour:	Characteristic of solvent
Odour threshold:	N.A.
pH:	N.A.
Melting point/freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Flash point:	< 0 °C
Evaporation rate:	N.A.
Flammability (solid, gas):	N.A.
Upper/lower flammability or explosive limits:	15 Vol % - 1.8 Vol %
Vapour pressure:	N.A.
Vapour density (Air=1):	>2
Relative density (Water=1):	N.A.
Solubility(ies):	Insoluble in water
Partition coefficient: n-octanol/water:	N.A.
Auto-ignition temperature (°C):	> 300 °C
Decomposition temperature:	N.A.
Kinematic viscosity:	N.A.
Explosive properties:	Non-explosive product
Oxidising properties:	N.A.

9.2 Other information
Information not available

9.2.1. Information with regard to physical hazard classes
Flammable aerosol

9.2.2. Other safety characteristics
Information not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Stable under normal conditions.

10.2 Chemical stability
Pressurized container. Do not pierce or burn even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 ° C / 122 ° F. Refer to the directions in section 7 for handling and storage.

10.3 Possibility of hazardous reactions
Under normal conditions of use and storage no dangerous reactions are foreseeable. The vapors, if released, can form explosive mixtures with the air. Aerosol containers, if overheated, can deform, burst and be thrown at a considerable distance.

10.4 Conditions to avoid
Avoid overheating.

10.5 Incompatible materials
Avoid contact with oxidizing materials. The product could catch fire. Avoid contact with strong reducing and oxidizing agents, strong acids and bases, high temperature materials.

10.6 Hazardous decomposition products
It does not decompose when used for its intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Unless otherwise specified, the data required by Regulation (EU) 878/2020 indicated below are to be understood as N.A .:

Toxicological information about the product:
TK 7
a) acute toxicity
Not classified
Based on available data, the classification criteria are not met.
b) skin corrosion/irritation
Not classified
Based on available data, the classification criteria are not met.
c) serious eye damage/serious eye irritation
Not classified
Based on available data, the classification criteria are not met.
d) respiratory or skin sensitization
Not classified
Based on available data, the classification criteria are not met.
e) mutagenicity of germ cells
Not classified
Based on available data, the classification criteria are not met.
f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met.
g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met.
h) specific target organ toxicity (STOT) — single exposure
Not classified
Based on available data, the classification criteria are not met.
(i) specific target organ toxicity (STOT) — repeated exposure
Not classified
Based on available data, the classification criteria are not met.
j) danger in case of aspiration
Not classified
Based on available data, the classification criteria are not met.
Toxicological information regarding the main substances present in the product:
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics
a) acute toxicity:
Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat > 5000 mg/m3 - Duration: 8h
butane - CAS: 106-97-8
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat 658 mg/l - Duration: 4h
propane - CAS: 74-98-6
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat 658 mg/l - Duration: 4h
b) skin corrosion/irritation:
No irritating and corrosive effects on the skin and mucous membranes.
c) serious eye damage/serious eye irritation:
Contact with liquefied gas can cause cold burns.
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatics
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat > 4951 mg/m3 - Duration: 4h
Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
2-(2-butoxyethoxy)ethyl acetate; diethyleneglycol(mono)butyl ether acetate - CAS: 124-17-4
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 11920 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit 5400 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat > 3 mg/l - Duration: 2H

11.2 Information on other hazards
Flammable product

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
Not classified for environmental hazards
Based on available data, the classification criteria are not met.
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics
a) Acute aquatic toxicity:
Endpoint: LC50 - Species: Fish = 1000 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss
Endpoint: EC50 - Species: Daphnia = 1000 mg/l - Duration h: 48 - Notes: Daphnia magna
Endpoint: EC50 - Species: Algae = 1000 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatics
a) Acute aquatic toxicity:
Endpoint: LC50 - Species: Fish > 1000 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss
Endpoint: LC50 - Species: Daphnia = 1000 mg/l - Duration h: 48 - Notes: Daphnia magna
Endpoint: EC50 - Species: Algae > 1000 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata
b) Chronic aquatic toxicity:
Endpoint: NOEC - Species: Fish = 0.131 mg/l - Notes: Oncorhynchus mykiss
Endpoint: NOEC - Species: Daphnia = 100 mg/l - Notes: Daphnia magna
2-(2-butoxyethoxy)ethyl acetate; diethyleneglycol(mono)butyl ether acetate - CAS: 124-17-4
a) Acute aquatic toxicity:
Endpoint: LC50 - Species: Fish 50 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia magna 664 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae (Pseudokirchneriella subcapitata) 1570 mg/kg - Duration h: 72

12.2 Persistence and degradability
2-(2-butoxyethoxy)ethyl acetate; diethyleneglycol(mono)butyl ether acetate - CAS: 124-17-4
Biodegradability: Rapidly degradable

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 PBT or vPvB substances in percentage greater than 0.1%.

12.6 Endocrine disrupting properties
No data available

12.7 Other adverse effects
No data 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. Avoid littering. Do not contaminate soil, sewers and waterways. Waste transportation may be subject to ADR restrictions. CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.
Additional disposal information:
CER CODE = 160504

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number
ADR-UN number: 1950
IATA-Un number: 1950
IMDG-Un number: 1950

14.2 UN proper shipping name
ADR-Shipping Name: Aerosol
IATA-Technical name: Aerosol
IMDG-Technical name: Aerosol

14.3 Transport hazard class(es)

ADR-Class: 2 5F
ADR-Label: 2
ADR - Hazard identification number: -
IATA-Class: 2.1
IATA-Label: 2.1
IMDG-Class: 2

14.4 Packing group
ADR-Packing Group: -
IATA-Packing group: -
IMDG-Packing group: -

14.5 Environmental hazards
Marine pollutant: No

14.6 Special precautions for user
IATA-Passenger Aircraft: ---
IATA-Cargo Aircraft: 203
IMDG-Technical name: Aerosol
IMDG-Page: F-D, S-U

14.7 Maritime transport in bulk according to IMO instruments
N.A.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.
Seveso Category - Directive 2012/18/EC:
P3a

Substances subject to authorisarion (Annex XIV REACH).
None.

Substances subject to exportation reporting pursuant to (EC) Reg. 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 carried out for the mixture

SECTION 16: OTHER INFORMATION

Full text of H codes mentioned in sections 2 - 3
H220 Highly flammable gas.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 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 NUMBER: 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: EC Regulation 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 STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation.

Classification and procedure used to derive it according to regulation (EC) 1272/2008 [CLP] in relation to mixture:
Aerosols 1, H222, H229 - Based on experimental evidence
Aquatic Chronic 3 H412 - Calculation method

GENERAL BIBLIOGRAPHY
Regulation (EU) 1907/2006 of the European Parliament (REACH)
Regulation (EU) 1272/2008 of the European Parliament (CLP)
Regulation (EU) 2020/878 (Annex II REACH Regulation)
Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)

Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
Regulation (EU) 2016/1179 (IX Atp. CLP)
Regulation (EU) 2017/776 (X Atp. CLP)
Regulation (EU) 2018/669 (XI Atp. CLP)
Regulation (EU) 2019/521 (XII Atp. CLP)
Delegated Regulation (EU) 2018/1480 (XIII Atp. CLP)
Regulation (EU) 2019/1148
Delegated Regulation (EU) 2020/217 (XIV Atp. CLP)
Delegated Regulation (EU) 2020/1182 (XV Atp. CLP)
Delegated Regulation (EU) 2021/643 (XVI Atp. CLP)
Delegated Regulation (EU) 2021/849 (XVII Atp. CLP)
Delegated Regulation (EU) 2022/692 (XVIII Atp. CLP)
Regulation (EU) 2020/878 of the European Parliament

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
ECHA website

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.