



MAROIL S.R.L.

Revision nr. 4

Dated 30/03/2022

Printed on 30/03/2022

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Technos XFS 0W-20 M2971

## Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878

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

#### 1.1. Product identifier

Code: M 371  
Product name: Technos XFS 0W-20 M2971

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

Intended use: 4 Stroke auto engine oil

#### 1.3. Details of the supplier of the safety data sheet

Name: MAROIL S.R.L.  
Full address: LOC. PONTE ALLA CILIEGIA  
District and Country: 55011 MARGINONE ALTOPASCIO (LU)  
ITALIA  
Tel. 0583/28731  
Fax 0583/286542

e-mail address of the competent person responsible for the Safety Data Sheet: msds@bardahl.it

#### 1.4. Emergency telephone number

For urgent inquiries refer to:  
Numeri telefonici dei principali Centri Antiveleni italiani (attivi 24/24 ore)  
Centro Antiveleni di Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)  
Centro Antiveleni di Milano 02 66101029 (CAV Ospedale Niguarda Ca` Granda - Milano)  
Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti - Bergamo)  
Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze)  
Centro Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma)  
Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I - Roma)  
Centro Antiveleni di Napoli 081 7472870 (CAV Ospedale Cardarelli - Napoli)

### SECTION 2. Hazards identification

#### 2.1. Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to (EU) Regulation 2020/878.  
Hazard classification and indication:

#### 2.2. Label elements

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



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Hazard pictograms: --

Signal words: --

Hazard statements:

**EUH210** Safety data sheet available on request.  
**EUH208** Contains: C14-16-18 Alkyl phenol  
May produce an allergic reaction.

Precautionary statements:

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### 2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

## SECTION 3. Composition/information on ingredients

### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
<b>distillates (petroleum), heavy paraffinic + hydrotreating</b> CAS 64742-54-7 EC 265-157-1 INDEX 649-467-00-8 REACH Reg. 01-2119484627-25	$50 \leq x < 80$	Asp. Tox. 1 H304
<b>1-Decene, homopolymer, hydrogenated</b> CAS 68037-01-4 EC 500-183-1 INDEX - REACH Reg. 01-2119486452-34	$10 \leq x < 20$	Asp. Tox. 1 H304
<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b> CAS 72623-87-1 EC 276-738-4 INDEX 649-483-00-5 REACH Reg. 01-2119474889-13	$1 \leq x < 5$	Asp. Tox. 1 H304
<b>Distillates (petroleum), hydrotreated heavy paraffinic</b> CAS 64742-54-7	$1 \leq x < 5$	Asp. Tox. 1 H304



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EC 265-157-1

INDEX 649-467-00-8

REACH Reg. 01-2119484627-25

**Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based**

CAS 72623-86-0

 $1 \leq x < 5$ 

Asp. Tox. 1 H304

EC 276-737-9

INDEX 649-482-00-X

REACH Reg. 01-2119474878-16

**C14-16-18 Alkyl phenol**

CAS -

 $1 \leq x < 5$ 

STOT RE 2 H373, Skin Sens. 1B H317

EC 931-468-2

INDEX -

REACH Reg. 01-2119498288-19

**Paraffin oils (petroleum), catalytic dewaxed heavy**

CAS 64742-70-7

 $1 \leq x < 5$ 

Asp. Tox. 1 H304

EC 265-174-4

INDEX 649-477-00-2

REACH Reg. 01-2119487080-42

**distillates (petroleum), solvent-dewaxed heavy paraffinic**

CAS 64742-65-0

 $1 \leq x < 5$ 

Asp. Tox. 1 H304

EC 265-169-7

INDEX 649-474-00-6

REACH Reg. 01-2119471299-27

**Distillates (petroleum), hydrotreated heavy paraffinic**

CAS 64742-54-7

 $1 \leq x < 5$ 

Asp. Tox. 1 H304

EC 265-157-1

INDEX 649-467-00-8

REACH Reg. 01-2119484627-25

**Distillates (petroleum), solvent-dewaxed light paraffinic**

CAS 64742-56-9

 $1 \leq x < 5$ 

Asp. Tox. 1 H304

EC 265-159-2

INDEX 649-469-00-9

REACH Reg. 01-2119480132-48

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. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.



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INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.  
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly 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

Block the leakage if there is no hazard.

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 into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.





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		systemic		systemic		systemic
Inhalation	1,2 mg/m3	VND			5,4 mg/m3	VND

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

### 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.

#### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### SKIN PROTECTION

Wear category I 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

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### ENVIRONMENTAL EXPOSURE CONTROLS

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

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	yellowish	
Odour	characteristic	
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Flammability	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	208 °C	

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Auto-ignition temperature	Not available
Decomposition temperature	Not available
pH	Not available
Kinematic viscosity	38 cSt
Solubility	Not available
Partition coefficient: n-octanol/water	Not available
Vapour pressure	Not available
Density and/or relative density	0,841 kg/l
Relative vapour density	Not available
Particle characteristics	Not applicable

**9.2. Other information**

9.2.1. Information with regard to physical hazard classes  
Information not available

9.2.2. Other safety characteristics

Viscosita a 40°C	38,47 cSt
Viscosità a 100°C	8,12 cSt
Punto di scorrimento	-45°C
Consistenza	Non pertinente
Punto di gocciolamento	Non pertinente

**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**



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Information not available

## SECTION 11. Toxicological information

### 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)

distillates (petroleum), heavy paraffinic + hydrotreating

LD50 (Oral):	> 5000 mg/kg Ratto - OECD Guideline 401
LD50 (Dermal):	> 5000 mg/kg Coniglio - OECD Guideline 402
LC50 (Inhalation vapours):	> 5,53 mg/l/4h Ratto - OECD Guideline 403

1-Decene, homopolymer, hydrogenated

LD50 (Oral):	> 5000 mg/kg Ratto - Equivalente o similare a OECD Guideline 423
LD50 (Dermal):	> 3000 mg/kg Coniglio - Equivalente o similare a OECD Guideline 402
LC50 (Inhalation vapours):	> 5,2 mg/l/4h Ratto - OECD Guideline 403





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Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

LD50 (Oral): > 5000 mg/kg Ratto - OECD Guideline 401  
LD50 (Dermal): > 5000 mg/kg Coniglio - OECD Guideline 402  
LC50 (Inhalation vapours): > 5,53 mg/l/4h Ratto - OECD Guideline 403

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based

LD50 (Oral): > 5000 mg/kg Ratto - OECD Guideline 401  
LD50 (Dermal): > 5000 mg/kg Coniglio - OECD Guideline 402  
LC50 (Inhalation vapours): > 5,53 mg/l/4h Ratto - OECD Guideline 403

Distillates (petroleum), hydrotreated heavy paraffinic

LD50 (Oral): > 5000 mg/kg Ratto - OECD Guideline 401  
LD50 (Dermal): > 5000 mg/kg Coniglio - OECD Guideline 402  
LC50 (Inhalation vapours): > 5,53 mg/l/4h Ratto - OECD Guideline 403

Distillates (petroleum), solvent-dewaxed light paraffinic

LD50 (Oral): > 5000 mg/kg OECD Guideline 401 - Ratto  
LD50 (Dermal): > 5000 mg/kg OECD Guideline 402 - Ratto  
LC50 (Inhalation vapours): 2,18 mg/l/4h Equivalente o similaare a OECD Guideline 403 - Ratto

Distillates (petroleum), hydrotreated heavy paraffinic

LD50 (Oral): > 5000 mg/kg Ratto - OECD Guideline 401  
LD50 (Dermal): > 5000 mg/kg Coniglio - OECD Guideline 402  
LC50 (Inhalation vapours): > 5,53 mg/l/4h Ratto - OECD Guideline 403

distillates (petroleum), solvent-dewaxed heavy paraffinic

LD50 (Oral): > 5000 mg/kg Ratto - OECD Guideline 401  
LD50 (Dermal): > 5000 mg/kg Coniglio - OECD Guideline 402  
LC50 (Inhalation vapours): > 5,53 mg/l/4h Ratto - OECD Guideline 403

Paraffin oils (petroleum), catalytic dewaxed heavy

LD50 (Oral): > 5000 mg/kg OECD Guideline 401 - Ratto  
LD50 (Dermal): > 5000 mg/kg OECD Guideline 402 - Coniglio  
LC50 (Inhalation vapours): 2,18 mg/l/4h Equivalente o similare a OECD Guideline 403 - Ratto

C14-16-18 Alkyl phenol

LD50 (Oral): > 2000 mg/kg Ratto - OECD Guideline 423  
LD50 (Dermal): > 2000 mg/kg Ratto - OECD Guideline 402

#### SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

#### SERIOUS EYE DAMAGE / IRRITATION



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Does not meet the classification criteria for this hazard class

#### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

#### C14-16-18 Alkyl phenol

Experimental test carried out on the "SALICILATO" component contained as an impurity C14-16-18 Alkyl phenol EC number: 931-468-2 | CAS number: 1190625-94-5

Method: OECD 406 (Skin Sensitization), Buehler Test

Species: Guinea pig

Results: Non-sensitizing to the skin.

Reference: SDS of the European supplier

Note: the substance "SALICYLATE" is not dangerous, therefore it does not appear in section 3.2 of the SDS, the impurity C14-16-18 Alkyl phenol EC number: 931-468-2 appears; CAS number: 1190625-94-5 which as a substance is sensitizing.

#### 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

**Technos XFS 0W-20 M2971**ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: 38 cSt

**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****12.1. Toxicity**

distillates (petroleum), heavy paraffinic +  
hydrotreating

EC50 - for Crustacea > 10000 mg/l/48h Dafnia

Chronic NOEC for Crustacea 10 mg/l/21d Dafnia

1-Decene, homopolymer, hydrogenated

LC50 - for Fish > 1000 mg/l/96h Trota arcobaleno

EC50 - for Crustacea > 1000 mg/l/48h Dafnia

Chronic NOEC for Crustacea 125 mg/l/21d Dafnia

C14-16-18 Alkyl phenol

LC50 - for Fish > 100 mg/l/96h Cyprinus carpio - OECD Guideline 203

EC50 - for Crustacea > 100 mg/l/48h Daphnia magna - OECD Guideline 202

EC50 - for Algae / Aquatic Plants > 100 mg/l/72h Pseudokirchnerella subcapitata -

Distillates (petroleum), hydrotreated heavy  
paraffinic

EC50 - for Crustacea > 10000 mg/l/48h Dafnia

Chronic NOEC for Crustacea 10 mg/l/21d Dafnia

Distillates (petroleum), hydrotreated heavy  
paraffinic

EC50 - for Crustacea > 10000 mg/l/48h Dafnia

Chronic NOEC for Crustacea 10 mg/l/21d Dafnia

**12.2. Persistence and degradability**

distillates (petroleum), heavy paraffinic +  
hydrotreating  
Entirely degradable

OECD Guideline 301 F



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1-Decene, homopolymer, hydrogenated  
NOT rapidly degradable

OECD Guideline 301 D

C14-16-18 Alkyl phenol  
Degradability: information not available

Lubricating oils (petroleum), C15-30,  
hydrotreated neutral oil-based  
Entirely degradable

OECD Guideline 301 F

Distillates (petroleum), hydrotreated heavy  
paraffinic  
Entirely degradable

OECD Guideline 301 F

Lubricating oils (petroleum), C20-50,  
hydrotreated neutral oil-based  
Entirely degradable

OECD Guideline 301 F

Distillates (petroleum), hydrotreated heavy  
paraffinic  
Entirely degradable

OECD Guideline 301 F

distillates (petroleum), solvent-dewaxed  
heavy paraffinic  
Entirely degradable

OECD Guideline 301 F

### 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  $\geq$  than 0,1%.

### 12.6. Endocrine disrupting properties



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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. Neat product residues should be considered special non-hazardous waste.

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



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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/EC: None

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

None

Regulation (EC) No. 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  $\geq$  than 0,1%.

Substances subject to authorisation (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

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Information not available

**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:

<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Skin Sens. 1B</b>	Skin sensitization, category 1B
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H317</b>	May cause an allergic skin reaction.
<b>EUH210</b>	Safety data sheet available on request.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- 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: 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



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3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EU) 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)

- 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.

**Changes to previous review:**

The following sections were modified:

03 / 08 / 11 / 12 / 15.