## Revision nr. 2 TRAFIMET GROUP SPA A SOCIO UNICO 🔻 trafimet Dated 27/10/2022 Printed on 27/10/2022 **ECO TEK** Page n. 1/15 Replaced revision:1 (Printed on: 13/06/2021)

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 **ECO TEK** 

Chemical name and synonym UTI000065 - UTI000095 4610-10HG-W00G-XFTF UFI:

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

Intended use Anti-adhesive for welding (aerosol)

**Identified Uses** Industrial Professional Consumer USE Uses Advised Against

The relevant uses are listed above. No other uses are recommended.

1.3. Details of the supplier of the safety data sheet

TRAFIMET GROUP SPA A SOCIO UNICO Name

Full address via del Lavoro, 8 District and Country 36020 Castegnero (VI)

ITALIA

Tel. +39 0444 739900 Fax +39 0444 739999

e-mail address of the competent person

responsible for the Safety Data Sheet msds@trafimet.com

1.4. Emergency telephone number

**NHS 111** For urgent inquiries refer to

### **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:

H229 Pressurised container: may burst if heated. Aerosol, category 3

### 2.2. Label elements



Revision nr. 2

Dated 27/10/2022 Printed on 27/10/2022

Page n. 2/15

Replaced revision:1 (Printed on: 13/06/2021)

ECO TEK

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

Hazard pictograms: --

Signal words: Warning

Hazard statements:

**H229** Pressurised container: may burst if heated.

Precautionary statements:

P102 Keep out of reach of children.

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.

**P271** Use only outdoors or in a well-ventilated area.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50°C / 122°F.

P501 Dispose of the product / container in accordance with local regulations.

5,00% by mass of the contents are flammable.

### 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%.

Other dangers:

Aerosol containers exposed to temperatures above 50 ° C can deform and burst and be thrown a considerable distance.

# **SECTION 3. Composition/information on ingredients**

### 3.1. Substances

Information not relevant

### 3.2. Mixtures

Contains:

Identification x = Conc. % Classification (EC) 1272/2008 (CLP)

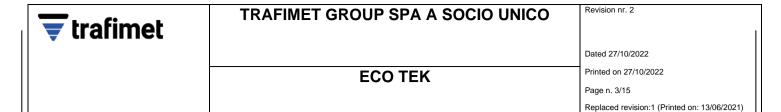
**PROPANE** 

INDEX 601-003-00-5 1,5  $\leq$  x < 2 Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to

Annex VI to the CLP Regulation: U

EC 200-827-9 CAS 74-98-6

REACH Reg. 01-2119486944-21



**BUTANE** 

INDEX 601-004-00-0 1,5  $\leq$  x  $\leq$  2 Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to

Annex VI to the CLP Regulation: C, U

EC 203-448-7 CAS 106-97-8

REACH Reg. 01-2119474691-32

**ISOBUTANE** 

INDEX 601-004-00-0  $0.5 \le x < 1.5$  Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to

Annex VI to the CLP Regulation: C, U

EC 200-857-2 CAS 75-28-5

REACH Reg. 01-2119485395-27

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

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 5,00 %

### **SECTION 4. First aid measures**

#### 4.1. Description of first aid measures

In case of skin contact:

Take off contaminated clothing and wash it before reuse.

Wash the areas of the body that have come into contact with the product with plenty of running water and soap if necessary.

In case of eye contact:

In case of contact with the eyes, rinse them with water for at least 15 minutes keeping the eyelids open, removing the contact lenses if the situation allows you to carry out the operation easily. Consult an ophthalmologist if irritation persists.

In case of ingestion:

Accidental ingestion of an aerosol product is hardly likely. If this occurs, consult a doctor; induce vomiting only on doctor's instructions; do not administer anything by mouth if the subject is unconscious.

In case of inhalation:

Take the injured person to fresh air and keep him warm and at rest. Consult a physician in case of difficulty in breathing.

Protective measures for first responders:

For the PPE necessary for first aid interventions, refer to section 8.2 of this Safety Data Sheet.

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

For symptoms and effects due to the contained substances refer to section 11.

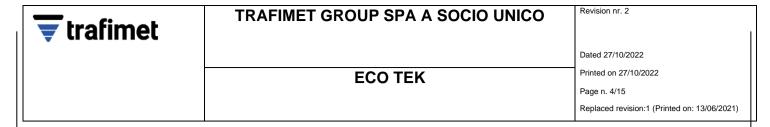
#### 4.3. Indication of any immediate medical attention and special treatment needed

In the event of an accident or discomfort, consult a doctor (if possible show the instructions for use or the safety data sheet). Treatment: None in particular.

# **SECTION 5. Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide (CO2), foam or powder extinguisher.



Extinguishing media which must not be used for safety reasons: None in particular.

#### 5.2. Special hazards arising from the substance or mixture

Do not inhale the gases produced by the explosion and combustion.

Combustion generates a complex mixture of gases, including CO (carbon monoxide), CO2 (carbon dioxide) and unburned hydrocarbons. The container exposed to a temperature higher than 50 ° C can deform and burst.

### 5.3. Advice for firefighters

If feasible from a safety point of view, move undamaged containers from the area of immediate danger. Cool the containers hit by the fire with water spray to avoid overheating. Do not let extinguishing media enter sewers or water courses.

Wear complete 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). 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 who do not intervene directly: Evacuate the surrounding areas and prevent the entry of external and unprotected personnel. Notify the emergency teams.

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 on environmental and health risks, respiratory tract protection, ventilation and personal protective equipment, refer to section 8.

For emergency responders: Emergency workers are recommended to wear adequate personal protective equipment as indicated in section 8.

In the event that the situation cannot be fully assessed or if there is a risk of oxygen deficiency, use only a self-contained respirator (Type EN137).

## 6.2. Environmental precautions

Prevent penetration into soil / subsoil. Prevent runoff into surface water or sewerage.

In the event of a gas leak or penetration into water courses, soil or sewage system, inform the responsible authorities. Suitable material for collection: absorbent, organic, sand.

#### 6.3. Methods and material for containment and cleaning up

Provide adequate ventilation. Use non-sparking tools and equipment. Wash with plenty of water. Limit and collect any spills with non-combustible absorbent material such as sand, earth, vermiculite, diatomite and dispose of the product through an authorized disposal company.

# 6.4. Reference to other sections

See also paragraphs 8 and 13.

### **SECTION 7. Handling and storage**

### 7.1. Precautions for safe handling

Container under pressure. Do not pierce or burn even after use. Do not use in the presence of open flames or other sources of ignition. Not smoking. Do not vaporize on flames or incandescent bodies. Do not spray on hot surfaces.

USE ONLY IN A WELL-VENTILATED PLACE.

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.



Precautions for work hygiene: 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. 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 25 ° C. Store at temperatures between -5 oC and +35 oC.

Useful life (duration / expiry): 10 months from production date. Do not store in warehouse for periods longer than 10 months. 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, do not pierce or open the aerosols containers. Keep away from food, drink and feed.

Incompatible materials: DO NOT store together with oxidizing, self-igniting, self-heating substances, organic peroxides, oxidizing agents, pyrophoric liquids and solids, explosives. See also paragraph 10 below. Indication for the premises: Fresh and adequately ventilated. Storage Classes: Refer to section 15.1 for Storage Classes / Limits (Seveso III).

Storage class TRGS 510 (Germany):

### 7.3. Specific end use(s)

Refer to the identified uses in subsection 1.2.

# **SECTION 8. Exposure controls/personal protection**

### 8.1. Control parameters

Regulatory References:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
GBR	United Kingdom TLV-ACGIH	EH40/2005 Workplace exposure limits (Fourth Edition 2020) ACGIH 2021

BUTANE						
Threshold Limit Value						
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	2400	1000	9600	4000	
MAK	DEU	2400	1000	9600	4000	
TLV	DNK	1200	500			
VLA	ESP		1000			Gases
VLEP	FRA	1900	800			
TLV	NOR	600	250			
NDS/NDSCh	POL	1900		3000		
WEL	GBR	1450	600	1810	750	



Revision nr. 2

Dated 27/10/2022

Printed on 27/10/2022

Page n. 6/15

Replaced revision:1 (Printed on: 13/06/2021)

ECO TEK

 WEL
 GBR
 4
 RESP

 TLV-ACGIH
 1000

PROPANE									
Threshold Limit Value									
Туре	Country	TWA/8h	TWA/8h STEL/15min			Remarks / Observations			
		mg/m3	ppm	mg/m3	ppm				
AGW	DEU	1800	1000	7200	4000				
MAK	DEU	1800	1000	7200	4000				
TLV	DNK	1800	1000						
VLA	ESP		1000						
TLV	NOR	900	500						
NDS/NDSCh	POL	1800							

ISOBUTANE							
Threshold Limit Value							
Туре	Country	TWA/8h		STEL/15mir	1	Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	2400	1000	9600	4000		
MAK	DEU	2400	1000	9600	4000		
TLV	DNK	1200	500				-
VLA	ESP		1000				Gases
VLEP	FRA	1900	800				-
TLV	NOR	600	250				
NDS/NDSCh	POL	1900		3000			
WEL	GBR	1450	600	1810	750		
WEL	GBR		4			RESP	
TLV-ACGIH					1000		

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

# 8.2. Exposure controls

Appropriate technical checks:

Properly ventilate the rooms where the product is stored and / or handled. Use only with adequate ventilation. Localized ventilation may be necessary for some operations. Minimize workplace exposure concentrations. Use technical equipment to keep concentrations in the air below the exposure limit or quidelines.

### HAND PROTECTION

Generally not necessary. For prolonged use or hypersensitivity it is recommended to protect your hands with gloves resistant to chemical products Type EN374 (PVC, PE, neoprene, Nitrile, Viton, not natural rubber). Gloves with protection factor 6 are recommended: breakthrough time> 480min, min thickness 0.3mm. Change the gloves that may be used in the presence of signs of wear, cracks or internal contamination.

SKIN PROTECTION:



Wear clean antistatic clothing with consistent coverage and antistatic safety footwear for professional use of category S2 (Type EN20345). In the event of prolonged contact, use protective clothing impervious to this material: gowns, aprons or complete coveralls (Type EN 340-EN13034).

#### EYE PROTECTION

Use safety glasses with side protection EN166. If exposure to vapors causes discomfort to the eyes, use full face gas masks.

#### RESPIRATORY PROTECTION

Generally not necessary for normal use. Air concentration levels should be kept below exposure limits. When the concentration in the air exceeds the TLV, respiratory protection is required: use EN149 FFP2 approved masks or EN140 semi-face respirators with Filter Type EN143: A2 or full face respirators EN136 (Filter Type EN143: A2).

#### 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

<b>Properties</b> Appearance	Value aerosol	Information
Colour	transparent	
Odour	characteristic	
Melting point / freezing point	not available	
Initial boiling point	not applicable	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	not applicable	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
рН	7	
Kinematic viscosity	not available	
Solubility	soluble	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	3 - 8 Bar	
Density and/or relative density	0,94	
Relative vapour density	not available	
Particle characteristics	not applicable	

### 9.2. Other information

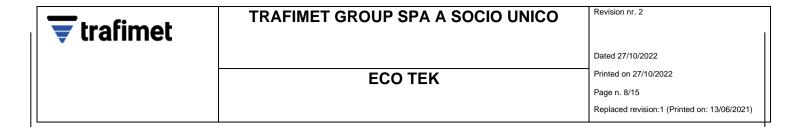
9.2.1. Information with regard to physical hazard classes

### Aerosol

% flammable components 5

9.2.2. Other safety characteristics

Information not available



# **SECTION 10. Stability and reactivity**

#### 10.1. Reactivity

Stable under normal conditions. Under normal conditions of use there are no particular risks of reaction with other substances.

#### 10.2. Chemical stability

Container under pressure. 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 air. Aerosol containers, if overheated, can deform, burst and be thrown at a considerable distance.

#### 10.4. Conditions to avoid

Avoid exposure to sunlight, avoid overheating and temperatures> 35 ° C. Keep away from oxidizing agents.

#### 10.5. Incompatible materials

Avoid contact with strong reducing and oxidizing agents, strong acids and bases, high temperature materials. Avoid contact with alkaline metals (Li, Na, K) or alkaline earth metals (Ca, Mg, Ba) and their alloys.

# 10.6. Hazardous decomposition products

It does not decompose under normal conditions. For Thermal decomposition refer to section 5.

# **SECTION 11. Toxicological information**

According to currently available data, this product has not yet produced health damages. Anyway, it must be handled according to good industrial practices.

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

Metabolism, toxicokinetics, mechanism of action and other information

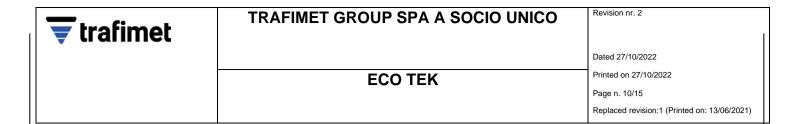
Information not available

Information on likely routes of exposure

Information not available



			Replaced revision:1 (Printed on: 13/06/2021)
Delayed and immediate effects as v	vell as chronic effects from sh	nort and long-term exposure	
Information not available			
Interactive effects			
Information not available			
ACUTE TOXICITY			
ATE (Inhalation) of the mixture: ATE (Oral) of the mixture: ATE (Dermal) of the mixture:		Not classified (no significant component) Not classified (no significant component) Not classified (no significant component)	
SKIN CORROSION / IRRITATION			
Does not meet the classification crit	eria for this hazard class		
SERIOUS EYE DAMAGE / IRRITA	<u> TION</u>		
Does not meet the classification crit	eria for this hazard class		
RESPIRATORY OR SKIN SENSITI	SATION		
Does not meet the classification crit	eria for this hazard class		
GERM CELL MUTAGENICITY			
Does not meet the classification crit	eria for this hazard class		
CARCINOGENICITY			
Does not meet the classification crit	eria 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**

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

### 12.1. Toxicity

Information not available

### 12.2. Persistence and degradability

**BUTANE** 

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

PROPANĚ

Solubility in water 0,1 - 100 mg/l

Rapidly degradable ISOBUTANE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

# 12.3. Bioaccumulative potential



Revision nr. 2

Dated 27/10/2022 Printed on 27/10/2022

Page n. 11/15

Replaced revision:1 (Printed on: 13/06/2021)

BUTANE

Partition coefficient: n-octanol/water 1,09

**PROPANE** 

Partition coefficient: n-octanol/water 1,09

**ISOBUTANE** 

Partition coefficient: n-octanol/water 1,09

#### 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.

**ECO TEK** 

## 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.

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.

# **SECTION 14. Transport information**

#### 14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1950

# 14.2. UN proper shipping name

ADR / RID: AEROSOLS IMDG: AEROSOLS



Revision nr. 2

Dated 27/10/2022 Printed on 27/10/2022

Page n. 12/15

Replaced revision:1 (Printed on: 13/06/2021)

**ECO TEK** 

AEROSOLS, NON-FLAMMABLE IATA:

### 14.3. Transport hazard class(es)

ADR / RID: Class: 2 Label: 2.2

IMDG: Class: 2 Label: 2.2

IATA: Class: 2 Label: 2.2



### 14.4. Packing group

ADR / RID, IMDG, IATA:

#### 14.5. Environmental hazards

ADR / RID: NO IMDG: NO IATA: NO

# 14.6. Special precautions for user

ADR / RID: HIN - Kemler: --Limited Tunnel Quantities: 1 restriction

code: (E)

Special provision: -

Pass.:

IMDG: EMS: F-D, S-U Limited Quantities: 1

IATA: Cargo: Maximum

quantity: 150

Kg Maximum

Packaging instructions:

Packaging

instructions:

203

203

quantity: 75

Kg A98, A145, Special provision:

A167, A802

### 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

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

Information not available

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK Nwg: Not hazardous to waters

## 15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

BUTANE

PROPANE

ISOBUTANE

### **SECTION 16. Other information**

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



# Revision nr. 2

Dated 27/10/2022 Printed on 27/10/2022

Page n. 14/15

Replaced revision:1 (Printed on: 13/06/2021)

**ECO TEK** 

Flam. Gas 1A Flammable gas, category 1A

Aerosol 3 Aerosol, category 3 Press. Gas (Liq.) Liquefied gas

H220 Extremely flammable gas.

H229 Pressurised container: may burst if heated.

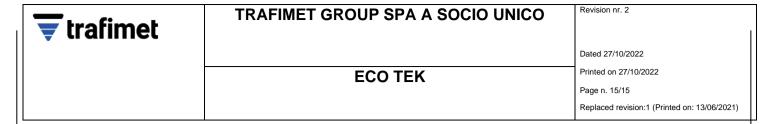
H280 Contains gas under pressure; may explode if heated.

#### 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.

This document has been prepared by an SDS technician who has received appropriate training.

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:

01 / 02 / 03 / 08 / 09 / 11 / 12 / 15 / 16.