

According to Reg. (EC) 1907/2006 – Regulation 878/2020

Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024

Version 2

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND COMPANY/ORGANIZATION

#### 1.1 Product identification

Product name: UNIVERSAL RED

UFI Code: 9KT2-706D-K005-DG5T

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

Waterproofing product

Use: Professional

## 1.3 Information on the supplier of the safety data sheet

Company name: Imper Italia srl Address: Via Rita Atria, 9

10079 Mappano (TO) +39 011 2225 449 safety@imper.it

Telephone:
Competent person responsible for the SDS:

## 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: HAZARD IDENTIFICATION**

#### 2.1 Classification of the substance or mixture

The product is dangerous according to Regulation (EC) 1272/2008 and subsequent amendments.

## Classification according to Regulation (EC) n. 1272/2008 (CLP)

**STOT RE 2 H373** 

## 2.2 Elements in the label



Pictograms:

Statement: Warning

H Phrases: H373 May causes damage to organs (lung) through prolonged or repeated exposure.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand



According to Reg. (EC) 1907/2006 – Regulation 878/2020

Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024 Version 2

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container in accordance with local/regional/national regulations

EUH208 Contains: REACTION MASS OF 5-CHLORO-2- METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1). May produce an allergic reaction.

#### 2.3 Other hazards

vPvB Substances: None - PBT Substances: None

## **SECTION 3: COMPOSITION / INFORMATION ON THE INGREDIENTS**

## 3.1 Substances

N.A.

#### 3.2 Mixtures

1.CAS No 2.EC No 3.Index No 4.REACH No	Name	Weight (%)	Classification 1272/2008 (CLP)
1.14808-60-7 2.238-878-4 3.Not Available 4.01-2120770509-45-XXXX	Quartz*	25 ≤ x < 30	STOT RE 1 H372
1.13463-67-7 2.236-675-5 3.Not Available 4.01-2119489379-17-XXXX	Titanium Dioxide	3 ≤ x < 7	Substance with an occupational limit in the workplace
1.7664-41-7 2.231-635-3 3.007-001-00-5 4.01-2119488876-14-XXXX	Ammonia	0.1 ≤ x < 1	Flam. Gas 2 H221 Skin Corr. 1B H314 Acute Tox. 3 H331 Aquatic Acute 1 H400
1.55965-84-9 2.611-341-5 3.613-167-00-5 4.01-2120764691-48-XXXX	REACTION MASS OF 5- CHLORO-2- METHYL- 2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H- ISOTHIAZOL-3-ONE (3:1)	0 ≤ x < 0.05	Acute Tox. 3, H301 Acute Tox. 2, H310 Skin Corr. 1C, H314 Skin Sens. 1A, H317 Eye Dam. 1, H318 Acute Tox. 2, H330 Aquatic Acute 1, H400 Aquatic Acute 1, H410 M-Chronic:100 M-Acute: 100 Specific concentration limits: Eye Dam. 1; H318: $C \ge 0,6\%$ Eye Irrit. 2; H319: $0,06\% \le C < 0,6\%$ Skin Corr. 1C; H314: $C \ge 0,6\%$ Skin Irrit. 2; H315: $0,06\% \le C < 0,6\%$ Skin Sens. 1A; H317: $C \ge 0,0015\%$

The full text of the H phrases are displayed in section 16 of the safety data sheet

## **SECTION 4: FIRST AID MEASURES**

## 4.1 Description of the first aid measures

In case of skin contact: Take off contaminated clothing. Take a shower immediately. Call a doctor immediately.

<sup>\*</sup> Containing 13% Free Crystalline Silica (Fine Fraction)



Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024

According to Reg. (EC) 1907/2006 – Regulation 878/2020 Version 2

Wash the contaminated garments before reusing them.

In case of eyes contact: Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 30

minutes and get medical attention.

In case of ingestion: Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head

should be kept low so that vomit does not enter the lungs. Get medical attention.

In case of inhalation: Move affected person to fresh air at once. When breathing is difficult, properly trained

personnel may assist affected person by administering oxygen. Get medical attention if

any discomfort continues.

#### 4.2 Primary symptoms and effects, both acute and delayed

See section 11

#### 4.3 Indication that prompt medical attention and special treatments are needed

Treat symptomatically.

#### **SECTION 5: FIRE PREVENTION MEASURES**

#### 5.1 Extinguishing media

SUITABLE EXTINGUISHING MEDIA:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS:

Do not use jets of water as it may disperse or spread the fire.

#### 5.2 Special hazards derived from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

## 5.3 Recommendations for fire fighting personnel

**GENERAL INFORMATION** 

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health.

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). Avoid contamination with oxidizing agents (nitrates, oxidizing acids, chlorinated bleaches, chlorine, etc.), as it can cause ignition.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

## 6.1 Personal precautions, personal protection equipment and emergency procedures

Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation

## 6.2 Environmental precautions

Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

## 6.3 Methods and materials for containment and cleaning

Absorb spillage with non-combustible, absorbent material. Transfer to covered steel drums for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

#### 6.4 Reference to other sections



According to Reg. (EC) 1907/2006 – Regulation 878/2020

**SECTION 7: HANDLING AND STORAGE** 

Wear protective clothing as described in Section 8 of this safety data sheet.

Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024 Version 2

#### ·

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists. Don't use empty container before they have been cleaned. Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. Contamined clothing should be changed before entering eating areas. Do not eat or drink while working. See also section 8 for recommended protective equipment.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10).

#### 7.3 Specific final uses

Information not available

## **SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION**

#### 8.1 Control parameters

## **OCCUPATIONAL EXPOSURE LIMITS (OEL)**

Powders containing crystalline silica in a percentage greater than or equal to 1%:

Limit values (ACGIH & AIDII 2007):

silica, crystalline

TWA 8h - 0.1 mg/m 3 (IOLEV)

Titanium dioxide

TWA/8h 10mg/m3

## **Derived No effect level (DNEL)**

## **Titanium dioxide**

Oral 700 mg/kg bw/day (Systemic, chronic) \*

## Ammonia

Dermal 6.8 mg/kg bw/day (Systemic, Chronic)

Inhalation 47.6 mg/m³ (Systemic, Chronic)

Inhalation 14 mg/m<sup>3</sup> (Local, Chronic)

Dermal 6.8 mg/kg bw/day (Systemic, Acute)

Inhalation 47.6 mg/m³ (Systemic, Acute)

Inhalation 36 mg/m³ (Local, Acute)

Dermal 6.8 mg/kg bw/day (Systemic, Chronic) \*

Inhalation 0.0238 mg/m³ (Systemic, Chronic) \*

Oral 6.8 mg/kg bw/day (Systemic, Chronic) \*

Inhalation 2.8 mg/m³ (Local, Chronic) \*

Dermal 6.8 mg/kg bw/day (Systemic, Acute) \*

Inhalation 23.8 mg/m³ (Systemic, Acute) \*

Oral 6.8 mg/kg bw/day (Systemic, Acute) \*

Inhalation 7.2 mg/m³ (Local, Acute) \*

# Mixture of: 5-chloro-2-methyl-2Hisothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Inhalation 0.02 mg/m³ (Local, chronic)

Inhalation 0.04 mg/m³ (Local, acute)

Oral 0.09 mg/kg bw/day (Systemic, chronic) \*



According to Reg. (EC) 1907/2006 - Regulation 878/2020

Inhalation 0.02 mg/m³ (Local, chronic) \*
Oral 0.11 mg/kg bw/day (Systemic, acute) \*
Inhalation 0.04 mg/m³ (Local, acute) \*

\* Values for General Population

## **Predicted No Effect Concentration (PNEC)**

#### **Titanium dioxide**

0.184 mg/L (Fresh water)
0.0184 mg/L (Marine water)
1000 mg/kg sediment dw (Sediment (Freshwater))
100 mg/kg sediment dw (Sediment (Marine))
100 mg/kg soil dw (Soil)
100mg/L (STP)

#### **Ammonia**

0.001 mg/L (Water (Fresh)) 0.008 mg/L (Water - intermittent release) 0.001 mg/L (Water (Marine)) 0.022 mg/kg soil dw (Soil)

# Mixture of: 5-chloro-2-methyl-2-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

 $3.39~\mu g/L~(Water~(Fresh))$   $3.39~\mu g/L~(Water~-intermittent~release)$   $3.39~\mu g/L~(Water~(Marine))$  0.027~m g/k g~sediment~dw~(Sediment~(Fresh)) 0.027~m g/k g~sediment~dw~(Sediment~(Marine)) 0.01~m g/k g~soil~dw~(Soil) 0.23~m g/L~(STP)

## **Engineering controls**

Ensure adequate ventilation, especially in closed areas.

Make sure the eye washes and showers are close to the workplace.

Use anti-exposure equipment

Provide an emergency exit.

## 8.2 Exposure controls

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

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 B 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

Pagina 5 di 11

Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024

Version 2



Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024

Version 2

According to Reg. (EC) 1907/2006 - Regulation 878/2020

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.

Eye protection: Wear airtight protective goggles (see standard EN 166).

Skin protection Wear professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC

and standard EN ISO 20344). Wash body with soap and water after removing protective

clothing.

## **SECTION 9: INFORMATION ON THE ESSENTIAL PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1 Information on the essential physical and chemical properties

Appearance:	Liquid
Colour:	Red
Odour:	Characteristic
Olfactory threshold:	N.A.
pH:	8
Melting/freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Flash point:	N.A.
Evaporation rate:	N.A.
Flammability (solids and gases):	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour pressure:	N.A.
Vapour density:	N.A.
Relative density:	N.A.
Solubility:	Soluble
Partition coefficient (n-octanol/water):	N.A.
Auto ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	Not explosive
Oxidizing properties:	Not oxidant

## 9.2 Other information

Information not available

## 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

Information not available

## 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of dangerous reactions

Under normal conditions of use and storage, dangerous reactions are not foreseeable.



According to Reg. (EC) 1907/2006 - Regulation 878/2020

Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024

Version 2

#### 10.4 Conditions to avoid

Temperatures below 5°C

(to preserve the technical qualities of the product).

#### 10.5 Incompatible materials

Information not available.

#### 10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be formed.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

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

Toxicological information of the mixture: N.A.

Toxicological information of the main substances found in the mixture:

Unless otherwise specified, the data required by Regulation (EU) 878/2020 indicated below are to be understood N.A.

(a) acute toxicity;

Quartz

Oral (Rat) LD50: 500 mg/kg

Titanium dioxide

Oral (Rat) LD50: > 5 000 mg/kg

Dermal (Rabbit) LD50: >10000 mg/kg

Inhalation (Rat) LC50: > 6.82 mg/l/4h

Ammonia

Inhalation (Rabbit) LC50; 4.55 ppm4h

Oral (Rat) LD50; 350 mg/kg

Mixture of: 5-chloro-2-methyl-2Hisothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC

no. 220-239-6] (3:1)

Inhalation (Rat) LC50: = 2.36000 mg/l 4h

Dermal (Rabbit) LD50: = 660.00000 mg/kg

Oral (Rat) LD50: = 53.00000 mg/kg

- (b) skin corrosion/irritation;
- (c) serious eye damage/irritation;
- (d) respiratory or skin sensitisation;
- (e) germ cell mutagenicity;
- (f) carcinogenicity;
- (g) reproductive toxicity;
- (h) STOT-single exposure;
- (i) STOT-repeated exposure;

The product is classified STOT RE 2 H373

(j) aspiration hazard.

#### 11.2 Information on other hazard

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with effects on human health subject to evaluation at concentrations >=0.1%.

#### **SECTION 12: ECOLOGICAL INFORMATION**



According to Reg. (EC) 1907/2006 - Regulation 878/2020

Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024

., .

Version 2

#### 12.1 Toxicity

Endpoint		Test duration (hr)	Species	Value
Titanium dioxide				
LC50	96	Fish		1000 mg/l
EC50		48	Crustaceans	100mg/l
EC50		72	Algae	100mg/l
NOEC		96	Algae	5600 mg/l
Ammonia				
EC50		48h	Crustaceans	>92.578mg/L
LC50	96h	Fish		0.083mg/l
NOEC(ECx)		720h	Crustaceans	0.02mg/l
Mixture of: 5-chloro-	2-methy	·l-2Hisothiazol-3-one [E	C no. 247-500-7] and 2-mo	ethyl-2H-isothiazol-3-one [EC
no. 220-239-6] (3:1)				
EC50		48	Crustacea	0.12 mg/L
LC50	96	Fish		0.22 mg/L
EC50		72	Algae	0.048 mg/L
NOEC		72	Algae	0.0012 mg/L
NOEC		28d	Fish	0.098 mg/L
NOEC		21d	Crustacea	0.004 mg/L

## 12.2 Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air	
Titanium Dioxide	HIGH	HIGH	
Ammonia	HIGH	HIGH	
Mixture of: 5-chloro-2-methyl-2Hisothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC			
no. 220-239-6] (3:1)	HIGH	HIGH	

## 12.3 Bioaccumulation potential

Titanium dioxide

LOW (BCF = 10)

Ammonia

LOW (LogKOW = 0.229)

Mixture of: 5-chloro-2-methyl-2Hisothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

LOW (LogKOW = 0.0444)

## 12.4 Mobility in the soil

Titanium dioxide

LOW (KOC = 23.74)

Ammonia

LOW (Log KOC = 14.3)

Mixture of: 5-chloro-2-methyl-2Hisothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

LOW (KOC = 45.15)

#### 12.5 Results of PBT and vPvB evaluation

vPvB Substances: None - PBT Substances: None

## 12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine-disrupting properties under Article 57(f) of REACH.



According to Reg. (EC) 1907/2006 – Regulation 878/2020

Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024

Version 2

#### 12.7 Other adverse effects

No data available

## **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1 Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

#### **SECTION 14: INFORMATION ON TRANSPORT**

14.1 UN number or ID number

N.A.

14.2 UN proper shipping name.

N.A.

14.3 Transport hazard class(es).

N.A.

14.4 Packing group.

N.A.

14.5 Environmental hazards.

N.A.

14.6 Special precautions for user.

N.A.

14.7 Maritime transport in bulk according to IMO instruments

N.A

## **SECTION 15: REGULATORY INFORMATION**

15.1 Specific health safety and environment standards and legislation for the substance or mixture Seveso category

None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006. None.

Substances in Candidate List (Art. 59 REACH)

None.

Substances subject to authorisarion (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.



According to Reg. (EC) 1907/2006 - Regulation 878/2020

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Dir. 2004/42/CE (VOC Directive)

Content: 0g/l

#### 15.2 Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

#### **SECTION 16: OTHER INFORMATION**

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

Flam. Gas. 2 Flammable gas, category 2

Acute Tox. 2 Acute toxicity, category 2

Acute Tox. 3 Acute toxicity, category 3

Acute Tox. 4 Acute toxicity, category 4

Skin Corr. 1 Skin corrosion, category 1

Skin Irrit. 2 Skin irritation, category 2

Skin Sens. 1 Skin sensitization, category 1

Eye Irrit. 2 Eye irritation, category 2

Eye Dam. 1 Serious eye damage, category 1

STOT RE 2 Specific target organ toxicity - repeated exposure, category 2

STOT RE 1 Specific target organ toxicity - repeated exposure, category 1

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1

Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1

H221 Flammable gas.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H372 Causes damage to organs (lung) through prolonged or repeated exposure.

H373 May cause damage to organs (lung) through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### Classification and procedure used to classify the mixture according to regulation (EC)1272/2008 [CLP].

STOT RE 2 H373 (Calculation method)

#### 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

Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024

Version 2



According to Reg. (EC) 1907/2006 - Regulation 878/2020

- 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
- WGK: Water hazard classes (German).

#### **GENERAL BIBLIOGRAPHY**

Regulation (EC) 1907/2006 of the European Parliament (REACH)

Regulation (EC) 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)

Delegated Regulation (EU) 2023/1434 (XIX Atp. CLP)

Delegated Regulation (EU) 2023/1435 (XX Atp. CLP)

Delegated Regulation (EU) 2024/197 (XXI 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
- 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.

Changes from previous version:

01/02/03/04/05/06/07/08/09/10/11/12/13/14/15/16.

Safety Data Sheet dated 09/09/2024

Print date: 09/09/2024

Version 2