



RAPID-FIX D4 KOBY

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

1.1. Product identifier: RAPID-FIX D4 KOBY

Other means of identification:

UFI: 4YX0-Y0P9-Q000-P0KN

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

Description/Use: One-component, moisture curing polyurethane liquid adhesive for woodworking and building.

Identified Uses	Industrial	Professional	Consumer
SEALANTS AND ADHESIVES FORMULATIONS IN INDUSTRY	SU: 10. ERC: 2. PROC: 3, 4, 5, 8a, 8b, 9. PC: 1.		- -
INDUSTRIAL APPLICATIONS OF SEALANTS AND ADHESIVES	SU: 17, 19. ERC: 5, 8b. PROC: 10, 8a, 8b. PC: 1.	SU: 17, 19. ERC: 5, 8b. PROC: 10, 8a, 8b. PC: 1.	
CHEMICAL SUBSTANCE USE IN LABORATORY, INDUSTRIAL	PROC: 15. PC: 1, 21.		- -

1.3. Identification of the supplier of the safety data sheet:

TDA - Transformação E Distribuição De Abrasivos, Lda Zona Industrial Vista Alegre, Lote 8
 3850-184 Albergaria-a-Velha - Portugal
 qualidade@tda-abrasivos.com
 koby.pt

1.4. Emergency telephone number: TDA: (+351) 234 612 730 (8:00-12:00 h / 13:00-17:00 h) (working hours)
 Poisons Information Center (CIAV): (+351) 800250250
 National Emergency Number: 112

SECTION 2. Hazard identification

**2.1. Classification of the substance or mixture:
 Regulation 1272/2008 (CLP):**

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.



SECTION 2. Hazard identification (continued)

Hazard classification and indication:

Carcinogenicity, category 2	H351	Suspected of causing cancer.
Acute toxicity, category 4	H332	Harmful by inhalation.
Specific target organ toxicity – exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes severe eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity – single exposure categories 3	H335	May cause irritation of the respiratory tract.
Respiratory sensitization, category 1	H334	When inhaled, may cause allergy or asthma symptoms or breathing difficulties.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.

**2.2. Elements of the Label:
 Regulation (EC) 1272/2008 (CLP):**

Hazard pictograms:



Signal words: Danger

Hazard statements:

H351	Suspected of causing cancer.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.

Supplementary Information

EUH204 Contains isocyanates. May produce an allergic reaction.

Precautionary statements:

P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P342+P311	If experiencing respiratory symptoms: call a POISON CENTER / doctor / . . .
P304+P340	IF INHALED: remove person to fresh air and keep comfortable for breathing.
P201	Obtain special instructions before use.
P308+P313	IF exposed or concerned: Get medical advice / attention.

Contains: DIPHENYLMETHANE DIISOCIANATE AND HOMOLOGUES, ISOMERS

As from 24 August 2023 adequate training is required before industrial or professional use.

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 components

3.1. Substances:

Not applicable

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification	1272/2008 (CLP)
DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.			
CAS	9016-87-9	40 = x < 42,5	Carc. 2 H351, Acute Tox. 4 H332, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317
EC			Skin Irrit. 2 H315: = 5%, Eye Irrit. 2 H319: = 5%, Resp. Sens. 1 H334: = 0,1%, STOT SE 3 H335: = 5%
INDEX			LC50 Inhalation mists/powders: 1,5 mg/l/4h
DIISONONYL PHTHALATE			
CAS	28553-12-0	9 = x < 10,5	
EC	249-079-5		
INDEX			
REACH Reg.	01-2119430798-28		
2,2 - DIMORPHOLINODIETHYL ETHER			
CAS	6425-39-4	0,3 = x < 0,35	Eye Irrit. 2 H319
EC	229-194-7		
INDEX			
REACH Reg.	01-2119969278-20-xxxx		

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.

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. Means of extinction

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.



RAPID-FIX D4 KOBY

SECTION 5. Fire-fighting measures (continued)

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. Measures to be taken in case of accidental leakage

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 materials for containment and cleaning
 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.

6.4. Reference to other sections
 Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

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

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

Storage class TRGS 510 (Germany): 10

7.3. Specific end use(s)
 Information not available



SECTION 8. Exposure controls/Personal protection

8.1. Control parameters

Regulatory References:

CZE	Česká Republika	Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemičlijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
SWE	Sverige	Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	TLV-ACGIH	ACGIH 2020

DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.

Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH			0,005			

DIISONONYL PHTHALATE

Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	3	0,171	10	0,57	
TLV	DNK	3				
GVI/KGVI	HRV	5				
NGV/KGV	SWE	3		5 (C)		
WEL	GBR	5				

2,2 - DIMORPHOLINODIETHYL ETHER

Predicted no-effect concentration - PNEC								
Normal value in fresh water				0,1	mg/l			
Normal value in marine water				0,01	mg/l			
Normal value for fresh water sediment				8,2	mg/kg			
Normal value for marine water sediment				0,82	mg/kg			
Normal value for water, intermittent release				1	mg/l			
Normal value of STP microorganisms				100	mg/l			
Normal value for the terrestrial compartment				1,58	mg/kg			
Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	0,5 mg/kg/d				
Inhalation			VND	1,8 mg/m3			VND	7,28
Skin			VND	0,5 mg/kg/d			mg/m3 VND	1 mg/kg/d

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.
 VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified.



SECTION 8. Exposure controls/Personal protection (continued)

8.2. Exposure control

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice. Personal protective equipment must be CE marked, showing that it complies with applicable standards. Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

Protect your hands with work gloves, category III (ref. standard EN 374). For the final choice of material you need to assess the type of use. In case of contact for the short term or as protection against splashes, use gloves made of nitrile (0.3mm thickness, permeation time >480 min.). In the event of continued exposure use butyl rubber gloves (0.4mm thickness, permeation time > 480 min.). Contaminated gloves should be removed.

SKIN PROTECTION

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

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

In case of exceeding the threshold value (eg, TLV-TWA) of the substance or one or more of the substances present in the product, it is advisable to wear a mask with filter type A for organic vapors, the class (1, 2 or 3) must be chosen according to the limit concentration of use (1000, 5000 or 10000 ppm) (ref. standard EN 14387).

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	pasty liquid	
Colour	yellowish	
Odour	typical	
Melting point / freezing point	Not applicable	Reason for missing data: Determination is not technically possible.
Initial boiling point	Not applicable	Reason for missing data: Determination is not technically possible.
Boiling range	Not applicable	Reason for missing data: Determination is not technically possible.
Flammability	Not flammable	Method: A10 regulation EC 440/2008
Lower explosive limit	Not applicable	
Upper explosive limit	Not applicable	
Flash point	Not applicable	
Auto-ignition temperature	Not available	
Decomposition temperature	Not applicable	
pH	Not applicable	Reason for missing data: Insoluble in water.
Kinematic viscosity	Not available	
Dynamic viscosity	5000 - 7000 cps	Method: UNI EN ISO 3219 - Rotational viscometer
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not applicable	
Vapour pressure	Not applicable	
Density and/or relative density	1,09-1,13	Method: ISO 1183-1 A
Relative vapour density	Not available	
Particle characteristics	Not applicable	



SECTION 9. Physico-chemical properties (continued)

9.2. Other information

9.2.1 Information with regard to physical hazard classes
 Information not available

9.2.2 Other safety features

VOC (Directive 2010/75/EC) 0,31 % - 3,44 g/litre

SECTION 10. Stability and Reactivity

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

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

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

10.4. Conditions to avoid
 None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials
 Information not available

10.6. Hazardous decomposition products
 Information not available

SECTION 11. Toxicological Information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

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

Information on likely routes of exposure
 Information not available

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

Interactive effects
 Information not available



SECTION 11. Toxicological Information (continued)

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture: 3,7 mg/l
 ATE (Oral) of the mixture: Not classified (no significant component)
 ATE (Dermal) of the mixture: Not classified (no significant component)

DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.

LD50 (Oral): > 10000 mg/kg Rattus sp.
 LD50 (Dermal): > 9400 mg/kg Oryctolagus sp.
 LC50 (Inhalation mists/powders): 1,5 mg/l/4h Rattus sp.

DIISONONYL PHTHALATE

LD50 (Oral): > 10000 mg/kg Rat - Sprague-Dawley
 LD50 (Dermal): > 3160 mg/kg Rabbit - New Zeland white
 LC50 (Inhalation vapours): > 4,4 mg/l Rat - Sprague-Dawley

2,2 - DIMORPHOLINODIETHYL ETHER

LD50 (Oral): 2025 mg/kg Rattus sp.
 LD50 (Dermal): 3038 mg/kg Oryctolagus sp.

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation RESPIRATORY OR

SKIN SENSITISATION

Sensitising for the skin
 Sensitising for the respiratory system

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Suspected of causing cancer

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

May cause damage to organs

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

2,2 - DIMORPHOLINODIETHYL ETHER	
LC50 - for Fish	> 2150 mg/l/96h
EC50 - for Crustacea	> 100 mg/l/48h Daphnia sp.
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	100 mg/l

DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.	
LC50 - for Fish	> 1000 mg/l/96h Danio rerio
EC50 - for Algae / Aquatic Plants	> 1640 mg/l/72h Scenedesmus subspicatus
Chronic NOEC for Crustacea	> 10 mg/l Daphnia magna

DIISONONYL PHTHALATE	
LC50 - for Fish	> 102 mg/l/96h Danio rerio
EC50 - for Crustacea	> 74 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 88 mg/l/72h Scenedesmus subspicatus

12.2. Persistence and degradability

2,2 - DIMORPHOLINODIETHYL ETHER
 NOT rapidly degradable

DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.
 NOT rapidly degradable

DIISONONYL PHTHALATE	
Solubility in water	< 0,1 mg/l
Rapidly degradable	

12.3. Bioaccumulative potential

DIISONONYL PHTHALATE	
Partition coefficient: n-octanol/water	8,8
BCF	> 3

12.4. Mobility in soil

DIISONONYL PHTHALATE	
Partition coefficient: soil/water	6

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

Information not available



SECTION 13. Disposal considerations

13.1. Waste treatment methods

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

SECTION 14. Transport information

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

14.1. UN number or ID number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packaging group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for the user

Not applicable

14.7. Maritime transport in bulk in accordance with 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

Product

Point3

Contained substance

Point	52	DIISONONYL PHTHALATE
		REACH Reg.: 01-2119430798-28
Point	74	DIISOCYANATES

Regulation (EC) No. 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

Based on the available data, the product does not contain SVHC substances in percentage $\geq 0.1\%$.

Substances subject to authorization (Annex XIV REACH)

None



RAPID-FIX D4 KOBY

SECTION 15. Regulatory information (continued)

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.

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

WGK 1: Low hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances
 DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.

SECTION 16. Other Information

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

Carc. 2	Carcinogenicity, category 2
Acute Tox. 4	Acute toxicity, category 4
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Resp. Sens. 1	Respiratory sensitization, category 1
Skin Sens. 1	Skin sensitization, category 1
H351	Suspected of causing cancer.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
EUH204	Contains isocyanates. May produce an allergic reaction.

Use descriptor system:

ERC 2	Formulation into mixture
ERC 5	Use at industrial site leading to inclusion into/onto article
ERC 8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
PC 1	Adhesives, sealants
PC 21	Laboratory chemicals
PROC 10	Roller application or brushing
PROC 15	Use as laboratory reagent
PROC 3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC 4	Chemical production where opportunity for exposure arises
PROC 5	Mixing or blending in batch processes
PROC 8a	Transfer of substance or mixture (charging and discharging) at non- dedicated facilities
PROC 8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC 9	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
SU 10	Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU 17	General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment
SU 19	Building and construction work



SECTION 16. Other Information (continued)

- 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
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)



SECTION 16. Other Information (continued)

- 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.

The information contained in this sheet is based on our best knowledge up to the date of publication and is given in good faith. However, it should be understood as a guide and does not constitute a guarantee, since the operations with the product are not under our control, and this company assumes no responsibility for any loss or damage resulting therefrom. This information does not in any case exempt the user of the product from complying with and respecting the laws and regulations applicable to the product, safety, hygiene and protection of human health and the environment, and from carrying out sufficient verification and procedural testing of effectiveness. The workers involved and responsible for the safety area must have access to the information contained in this sheet in order to ensure safety in the storage, handling and transportation of this product.