

SAFETY DATA SHEET

according to Regulation No. 1907/2006 (REACH) and Commission Regulation

Version:

1.1

Issue date:

14.02.2023

Revision date: 09.05.2023

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

1.1 Product identifier

Chemical name/ trade name: HUBEX L

UFI: G300-A06S-J005-G217

Authorisation number: CZ-2014-0022

Producer: HUBEX CZ, s.r.o.

Address: Benešov, 25601, Pod Karlovem 2322

Distributor: HUBEX CZ, s.r.o.

Address: Benešov, 25601, Pod Karlovem 2322

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

Intended use: Rodenticide - biocide

Uses advised against: The product must not be used in ways other than those mentioned in section 1.

1.3 Details of the supplier of the safety data sheet

Supplier of SDS: HUBEX CZ, s.r.o.

Address: Benešov, 25601, Pod Karlovem 2322

Identification No.: 24842834

Tel: +420 317 722 297 www: www.hubex.cz Responsible person for this hubex@hubex.cz

SDS:

1.4 Emergency telephone number

Toxikologické informační středisko, Na Bojišti 1, 120 00 Praha 2. Pohotovostní telefon:+420 224 91 92 93 nebo +420 224 91 54 02,

www.tis-cz.cz

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to the EC Regulation No. 1272/2008 (CLP):

Reproductive toxicity, category 1B, H360D May damage the unborn child.

Specific target organ toxicity (repeated exposure), category 1, H372 Causes damage to organs

(blood) through prolonged or repeated exposure.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]:

Hazard pictogram(s):

Signal word(s): DANGER

UFI: G300-A06S-J005-G217

Contain: bromadiolone (ISO), Denatonium benzoate, 2,2'-iminodiethanol

Hazard statement(s):

H360D May damage the unborn child.

HUBEX®

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

Precautionary statement(s):

P102 Keep out of reach of children.

P201 Obtain special instructions before use.

P280 Wear protective gloves.

P308/313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents / container to an authorized person.

Supplemental information:

EUH401 To avoid risks to human health and the environment, comply with the instructions

for use.

Authorisation number: CZ-2014-0022

2.3 Other hazards

This product does not contain any substances which are classified as PBT or vPvB in a concentration of 0.1% by weight or higher.

This product does not contain SVHC in a concentration of 0.1% by weight or higher.

This product does not contain endocrine disruptors in a concentration of 0.1% by weight or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Name of the component	Content (weight %)	CAS EINECS Index N° Reg. Number	Classification accord (EC) No. 1272	
bromadiolone (ISO)	0.005	28772-56-7 249-205-9 607-716-00-8	Acute Tox. 1 Acute Tox. 1 Acute Tox. 1 Aquatic Acute 1 M -factor: 1 Aquatic Chronic 1 M -factor: 1 Repr. 1B $SCL: C \ge 0,003\%$ $STOT RE 1$ $SCL: C \ge 0,005\%$ $STOT RE 2$ $SCL: 0,0005\% \le C \le 0,005\%$	H330 H310 H300 H400 H410 H360D H372 H373
Denatonium benzoate	0.001	3734-33-6 223-095-2 01-2120102843-65-	Acute Tox. 4 Eye Dam. 1	H302/332 H318
2,2'-iminodiethanol	0-0.02	111-42-2 203-868-0 603-071-00-1 01-2119488930-28-0000	Acute Tox. 4 Eye Dam. 1 STOT RE 2 Skin Irrit. 2	H302 H318 H373 H315

For full text of H-statements see SECTION 16.



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SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:

If health problems occur or in case of doubt, notify the doctor and provide him with the information from this safety data sheet. Inhalation:

Due to the consistency, there is no risk of puffiness.

Skin contact:

Remove splashed clothing. Wash it before using it again. Wash the affected area with plenty of lukewarm water and soap. Get medical treatment if skin irritation persists.

Eye contact:

Immediately flush the eyes with a stream of running water, open the eyelids (for example, by force); if the victim wears contact lenses, remove them immediately. Rinse for at least 15-20 minutes. Depending on the situation, call emergency services or get medical treatment

Ingestion:

Rinse your mouth with clean water. If swallowed, seek medical attention immediately. Symptoms of poisoning may appear only after many hours, medical supervision is required for 48 hours after the accident. do not induce vomiting without first consulting a doctor. Protection of first aiders:

Pay attention to personal safety during rescue operations.

4.2 Most important symptoms and effects, both acute and delayed

Ingestion: Blood in the urine, bloody stools, bleeding from the nose and gums, formation of bruises, coughing up blood.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment. Bromadiolone causes a decrease in blood clotting. The antidote in case of poisoning is vitamin K1. In case of severe intoxication, in addition to vitamin K1, blood or blood plasma transfusion will also be necessary.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray, carbon dioxide, foam and powder fire extinguishers

Unsuitable extinguishing media: Direct water stream.

5.2 Special hazards arising from the substance or mixture

In case of fire, toxic substances and irritating smoke may be produced. Inhalation of dangerous decomposition products can cause serious damage to health.

5.3 Advice for firefighters

Use self-contained breathing apparatus and a full-body protective suit. Do not let the contaminated extinguishing agent escape into sewers, surface and ground water. If possible, remove product containers from the fire area, otherwise cool them with water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not eat, drink or smoke while working. Take unauthorized persons to safety. Do not inhale the dust. Use personal protective work equipment. Follow the instructions contained in Sections 7 and 8.

6.2 Environmental precautions

Avoid soil contamination and release to surface or ground water. Do not allow to enter the drain.

6.3 Methods and material for containment and cleaning up



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Use personal protective equipment in the event of a larger spill. Collect the product mechanically in a suitable way. Avoid creating dust. Dispose of the collected material according to the instructions in section 13. After removing the product, wash the contaminated area with plenty of water and detergent.

6.4 Reference to other sections

See section 7, 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not breathe dust/fumes. Avoid contact with skin and eyes. Wash your hands and other exposed body parts thoroughly before taking a break for food and rest. Do not eat, drink or smoke while working. Ensure adequate ventilation. Use personal protective equipment according to section 8. Observe the applicable health and safety legislation.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed, original packaging in cool, dry, lockable and well-ventilated places designated for this purpose. Carry out storage and transport separately from foodstuffs, medicines, feed, disinfectants and their packaging. Storage temperature < 25°C.

7.3 Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure limits: According to national legislation of target country.

Substance	CAS	Permissible exposure limits (mg/m³)	Maximum permissible concentration (mg/m³)	Note
2,2'-iminodiethanol	111-42-2	5		I - irritates mucous membranes (eyes, breathing passages), respectively. skin P -the substance can not be excluded severe late effects

Substances with Community Exposure Limits:

Substance	CAS	Limit values (mg/m³)		Note	
	G. 13	OEL	STEL		
No data available.					

DNEL

Denatonium benzoate (CAS: 3734-33-6)

Exposed group and route of exposure	Duration of exposure	Type of effect	Unit	Value
Workers				
Inhalation	Long-term (chronic)	systemic	mg/m³	4.99



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Dermal	Long-term (chronic)	systemic	mg/kg bw/d	1.43		
Consumers	Consumers					
Inhalation	Long-term (chronic)	systemic	mg/m³	0.893		
Dermal	Long-term (chronic)	systemic	mg/kg bw/d	0.51		
Oral	Long-term (chronic)	systemic	mg/kg bw/d	0.51		

2,2'-iminodiethanol (CAS: 111-42-2)

Exposed group and route of	Duration of exposure	Type of effect	l lait	Value
exposure	Duration of exposure	Type of effect	Unit	Value
Workers				
Inhalation	Long-term (chronic)	systemic	mg/m³	0.75
innaiation	Short-term (acute)	systemic	mg/m³	0.5
Dermal	Long-term (chronic)	systemic	mg/kg bw/d	0.13
Consumers		•		
Inhalation	Long-term (chronic)	systemic	mg/m³	0.125
	Short-term (acute)	systemic	mg/m³	0.125
Dermal	Long-term (chronic)	systemic	mg/kg bw/d	0.07
Oral	Long-term (chronic)	systemic	mg/kg bw/d	0.06

PNEC

Denatonium benzoate (CAS: 3734-33-6)

Component of the environm	ent	PNEC	Unit	Value
	Freshwater	PNEC water, fresh.	mg/L	0.1
	Freshwater, occasional leakage	PNEC water, fresh.	mg/L	1
Water environment	Freshwater sediment	PNEC sed., fresh.	mg/kg sediment dw	25
	Seawater	PNEC water, mar.	μg/L	10
	Marine sediment	PNEC sed., mar.	mg/kg sediment dw	2.5
Terrestrial environment /	Soil	PNEC soil	mg/kg soil dw	4.95
organisms	3011	FIVEC soil	ilig/kg soli uw	4.93

2,2'-iminodiethanol (CAS: 111-42-2)

Component of the environm	ent	PNEC	Unit	Value
	Freshwater	PNEC water, fresh.	mg/L	0.021
	Freshwater, occasional leakage	PNEC water, fresh.	mg/L	0.095
Water environment	Freshwater sediment	PNEC sed., fresh.	mg/kg sediment dw	0.096
	Seawater	PNEC water, mar.	mg/L	0.002
	Marine sediment	PNEC sed., mar.	mg/kg sediment dw	0.009
Microbiological activity	Wastewater treatment plant	PNEC sew. treat.	mg/L	100
Terrestrial environment /	Soil	PNEC soil	mg/kg soil dw	1.63
organisms	3011	FIVEC soil	ilig/kg soli uw	1.03
Food chain	Predators	PNEC oral.	mg/kg food	1.04

DNELs and PNECs values for the other components of the mixture haven't been determined.

8.2 Exposure controls

Technical measures:



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Prevent access by unauthorized persons. Take care of the usual measures to protect health at work and especially good ventilation. This can only be achieved by local exhaust or effective general ventilation. Do not eat, drink or smoke while working. wash your hands thoroughly with soap and water after work and before breaks for meals and rest. Keep work clothes in a separate place. Wash contaminated clothing immediately.

Individual protection measures

Respiratory protection:

Protection is not necessary.

Hand protection:

Hand protection: Disposable latex gloves suitable for protection against biological pollution according to STN EN 455-3. Replace damaged gloves immediately. In case of skin contamination, wash it thoroughly.

Eye / face protection:

Protection is not necessary.

Skin protection:

Normal work clothes, due to the nature of the product, special protective clothing is not necessary.

Thermal hazards:

It's not.

Environmental exposure controls:

Take care of the usual environmental protection measures, see point 6.2.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Property	Value	Method
Physical state:	Solid	
Colour:	Red-brown	
Odour:	Weak, after chocolate	
Odour threshold:	The data is not available	
pH :	No data available.	
Melting point / freezing point (°C):	> 200	
Boiling point or initial boiling point and boiling range (°C):	No data available.	
Flash point (°C):	> 425	
Evaporation rate:	The data is not available	
Flammability (gases, liquids and solids):	Non-flammable	
Lower and upper explosion limit:	The data is not available	
Vapour pressure (20 °C):	The data is not available	
Vapour pressure (50 °C):	The data is not available	
Relative vapour density:	The data is not available	
Density and/or relative density (g/cm³, 20 °C):	The data is not available	
Solubility (20 °C):	Insoluble	
Partition coefficient n-octanol/water (log value):	The data is not available	
Auto-ignition temperature:	The data is not available	
Decomposition temperature:	The data is not available	
Kinematic viscosity:	No data available.	
Refractive index (20 °C):	The data is not available	
Oxidising properties:	It has no oxidizing properties	
Explosive properties:	It is not explosive	
Particle characteristics:	Not applicable	



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9.2 Other information

VOC (%):

Dry matter content:

Additional information:

No data available.

No data available.

9.2.1 Information with regard to physical hazard classes

The product has no physical hazards.

9.2.2 Other safety characteristics

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No special reactions are known.

10.2 Chemical stability

Stable at normal temperature and pressure.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

Under normal use, the product is stable, does not decompose. Protect from high temperatures, frost and direct sunlight.

10.5 Incompatible materials

They are not known.

10.6 Hazardous decomposition products

They do not arise under normal use. At high temperatures and in the event of a fire, toxic gases may be produced.

SECTION 11: Toxicological information

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

Denatonium benzoate (CAS: 3734-33-6)

Acute toxicity:

Test type	Results	Exposure	Tested organisms
key study	749 mg/kg bw, LD50	oral: gavage	rat
key study	> 2 000 mg/kg bw, LD50	dermal	rat
OECD 403, key study	0.2 mg/L air	inhalation: dust	rat

Serious eye damage / irritation:

Test type	Results	Exposure	Tested organisms
key study	Category 1 (irreversible effects on the eye) based on GHS criteria	Eye	rabbit

Skin corrosion / irritation:

Test type	Results	Exposure	Tested organisms
key study	not irritating	Skin	rabbit



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Respiratory or skin sensitisation:

Test type	Results	Exposure	Tested organisms
key study	not sensitizing	Skin	guinea pig

STOT - single exposure:

Test type	Results	Exposure	Tested organisms
	No data available.		

STOT - repeated exposure:

Test type	Results	Exposure	Tested organisms
key study	15 mg/kg bw/day, NOAEL	oral	rat

Carcinogenicity:

Test type	Results	Exposure	Tested organisms
key study	16 mg/kg bw/day, NOAEL	oral: gavage	rat

Germ cell mutagenicity:

Test type	Results	Exposure	Tested organisms
weight of evidence	negative	intraperitoneal	mouse

Reproductive toxicity:

Test type	Results	Exposure	Tested organisms
OECD 421, key study	60 mg/kg bw/day, NOAEL	oral: gavage	rat

Aspiration hazard:

Test type	Results	Exposure	Tested organisms
	No data available.		

2,2'-iminodiethanol (CAS: 111-42-2)

Acute toxicity:

Test type	Results	Exposure	Tested organisms
Ikev study	0.62 mL/kg bw, LD50 675.8 mg/kg bw, LD50	oral: unspecified	rat
OECD 403, weight of evidence	0.2 mg/L air	inhalation: vapour	rat

Serious eye damage / irritation:

Test type	Results	Exposure	Tested organisms
	No data available.		



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Skin corrosion / irritation:

Test type	Results	Exposure	Tested organisms
	No data available.		

Respiratory or skin sensitisation:

Test type	Results	Exposure	Tested organisms
OECD 406, key study	not sensitising	Skin	guinea pig

STOT - single exposure:

Test type	Results	Exposure	Tested organisms
	No data available.		

STOT - repeated exposure:

Test type	t type Results		Tested organisms
OECD 408, key study	14 mg/kg bw/day (actual dose received), LOAEL 25 mg/kg bw/day (actual dose received), LOAEL	oral	rat
OECD 413, key study	15 mg/m³ air, NOAEC 15 mg/m³ air, LOAEC	inhalation	rat
OECD 411, key study	32 mg/kg bw/day, LOAEL	dermal	rat

Carcinogenicity:

Test type	Results	Exposure	Tested organisms
OECD 451, key study	40 mg/kg bw/day, LOAEL	dermal	mouse

Germ cell mutagenicity:

Test type	Results	Exposure	Tested organisms
OECD 474, key study	negative	dermal	mouse

Reproductive toxicity:

Test type	Results	Exposure	Tested organisms
IKEV STUDV		oral: drinking water	rat

Aspiration hazard:

Test type	Results	Exposure	Tested organisms
	No data available.		

mixture

Acute toxicity:

The product does not meet the criteria for classification.



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Serious eye damage / irritation:

Skin corrosion / irritation:

Respiratory or skin sensitisation:

STOT - single exposure:

The product does not meet the criteria for classification.

The product does not meet the criteria for classification.

The product does not meet the criteria for classification.

STOT - repeated exposure: Causes damage to organs (blood) through prolonged or repeated exposure .

Carcinogenicity: The product does not meet the criteria for classification.

Germ cell mutagenicity: The product does not meet the criteria for classification.

Reproductive toxicity: May damage the unborn child.

Aspiration hazard: The product does not meet the criteria for classification.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain endocrine disruptors in a concentration of 0.1% by weight or higher.

Other information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

The product does not meet the criteria for classification.

Denatonium benzoate (CAS: 3734-33-6)

Toxicity	Tested organisms	Results	Test type
IAcute toxicity to tish	Danio rerio (previous name: Brachydanio rerio)	> 100 mg/L, LC50 / 96 h	OECD 203
Acute toxicity to invertebrates	Crangon sp.	400 mg/L, LC50 / 96 h	
Acute toxicity to aquatic algae	Chlorella vulgaris	281.556 mg/L, EC50 / 72 h	OECD 201

2,2'-iminodiethanol (CAS: 111-42-2)

Toxicity	Tested organisms	Results	Test type
Acute toxicity to fish	Oncorhynchus mykiss (previous name: Salmo gairdneri)	460 mg/L, LC50 / 96 h	
Acute toxicity to invertebrates	Ceriodaphnia dubia	30.1 mg/L, EC50 / 48 h	
Acute toxicity to aquatic algae	Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	0.6 mg/L, NOEC / 72 h 9.5 mg/L, EC50 / 72 h	
Biotic degradation		Readily biodegradable (100%)	
log Kow / log Pow		-2.46 @ 25 °C	

12.2 Persistence and degradability

No data is available for the mixture.

The biodegradability of the component is given in sec. 12.1

12.3 Bioaccumulative potential

No data is available for the mixture.

The value of the partition coefficient of the component is given in sec. 12.1

12.4 Mobility in soil



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It is not mobile.

12.5 Results of PBT and vPvB assessment

This product does not contain any substances which are classified as PBT or vPvB in a concentration of 0.1% by weight or higher.

12.6 Endocrine disrupting properties

This product does not contain endocrine disruptors in a concentration of 0.1% by weight or higher.

12.7 Other adverse effects

They are not known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Catalogue No. of substance/mixture waste:

02 01 08 Agrochemical waste containing dangerous substances

Waste codes / waste designations according

to LoW:

15 01 10 Packaging containing residues of or contaminated by dangerous substances

Recommended procedure for substance/mixture waste disposal:

Danger of environmental contamination, proceed according to Act no. 541/2020 Coll., on waste as amended, and according to implementing regulations on waste disposal. Store the unused product in marked containers for waste collection and hand it over to a person authorized to dispose of waste (specialized company). It must not be disposed of together with municipal waste.

Recommended procedure for packaging disposal:

Store the contaminated packaging in marked containers for waste collection and hand it over to a person authorized to dispose of waste (a specialized company) for disposal. It must not be disposed of together with municipal waste. Empty packaging can be used for energy in a waste incinerator or deposited in a landfill of the appropriate category. Perfectly cleaned packaging can be handed over for recycling.

Physical / chemical properties that may affect waste treatment method:

They are not known.

Sewage disposal-relevant information:

Do not throw the unused product down the drain.

Other disposal recommendations:

Data not available.

SECTION 14: Transport information

	Type of transport	Land transport ADR / RID	Sea transport IMDG	Air Transport ICAO / IATA
14.1	UN number or ID number	There is no dangerous good in terms of transport.	There is no dangerous good in terms of transport.	There is no dangerous good in terms of transport.
14.2	UN proper shipping name	-	-	-
	Transport hazard class(es)	-	-	-
	Classification code	-	-	-
14.3	Labels			



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14.4	Packing group	-	-	-

14.5 Environmental hazards

No data available.

14.6 Special precautions for user

See sections 4-8

14.7 Maritime transport in bulk according to IMO instruments

Does not apply.

Other information

Type of transport	Land transport ADR / RID	Sea transport IMDG	Air Transport ICAO / IATA
Limited quantities:	-	-	-
Excepted quantities:	-	-	-
Transport category:	-	-	-
Tunnel restriction code:	-	-	-
Segregation group:	-	-	-

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

all as amended and including implementing regulations

Regulation (EC) No. 1272/2008 (CLP) on classification, labelling and packaging of substances and mixtures

Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Regulation (EC) No. 528/2012 concerning the making available on the market and use of biocidal products (BPR)

Applicable national regulations - Czech Republic

Act No. 350/2011 Coll., on Chemical Substances and Chemical Mixtures and on Amendments to Certain Acts (Chemical Act).

Government Regulation No. 361/2007 Coll., which establishes the conditions for health protection at work

Act No. 258/2000 Coll., on the protection of public health as amended.

Act No. 541/2020 Coll., on waste Act No. 477/2001 Coll., on packaging Act No. 201/2012 Coll., on air protection Act No. 254/2001 Coll., on water.

Regulation (EC) No. 528/2012 on biocides Act No. 324/2016 Coll., on biocides

The product contains substance bromadiolone (ISO), that is included in Annex XVII. of REACH Regulation.

15.2 Chemical safety assessment

A chemical safety assessment has not been performed for this mixture. The determination of safe handling conditions is based on the risk assessment of individual components.

SECTION 16: Other information

Complete text of all classifications and hazard classes referred to in SECTION 3

Hazard class: Acute Tox. 1 - Acute Toxicity, category 1

Acute Tox. 2 - Acute Toxicity, category 2



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Acute Tox. 4 - Acute Toxicity, category 4

Aquatic Acute 1 - Acute aquatic toxicity, category 1

Aguatic Chronic 1 - Chronic (long term) aguatic hazard, category 1

Eye Dam. 1 - Serious eye damage, category 1 Repr. 1B - Reproductive toxicity, category 1B

STOT RE 1 - Specific target organ toxicity (repeated exposure), category 1 STOT RE 2 - Specific target organ toxicity (repeated exposure), category 2

Skin Irrit. 2 - Skin irritation, category 2

H-statements: H300 Fatal if swallowed.

H302 Harmful if swallowed. H310 Fatal in contact with skin. H315 Causes skin irritation.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H360D May damage the unborn child.

H372 Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H373 May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Abbreviations:

ADR Accord Dangereuses Route
CAS Chemical Abstracts Service
DNEL Derived no-effect level
EC50 Effect concentration for 50%

EINECS European Inventory of Existing Commercial Chemical Substances

IATA International Air Transport Association
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods

LC50 Lethal concentration for 50%

LD50 Lethal dose for 50%

LOAEC Lowest observable adverse effect concentration

LOAEL Lowest observable adverse effect level NOAEC No observable adverse effect concentration

NOAEL No observable adverse effect level

NOEC No observable effect concentration

NPK-P Maximum permissible concentration

OEL Occupational Exposure Limit (workplace exposure limit - 8 hours / shift)

PBT Persistent, bioacumulative and toxic
PEL Permissible exposure limits

PEL Permissible exposure limits
PNEC Predicted no-effect concentration

RID Regulations for the International Carriage of Dangerous Goods by Rail

SCL Specific concentration limits

STEL Short Term Exposure Limit (short exposure - corresponds to approx. 15 min.)

VOC Volatile organic substances

vPvB Very persistent and very bioacumulative

WGK Hazard classes for water (Wassergefährdungsklassen)

Correction of supplier information - name and ID number.



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This revision follows version 1 from 14.2.2023 and is in accordance with Regulation (EC) No. 1907/2006 (REACH) and No. 1272/2008 (CLP).

Key literature references and sources for data: SW CASEC, information from the manufacturer of the active substance

The classification was carried out by the calculation method.

Instructions for training

Familiarize workers with the recommended method of use, mandatory protective equipment, first aid and prohibited handling of the product.

Other information

The safety data sheet contains data to ensure safety and health protection at work and environmental protection. the given data correspond to the current state of knowledge and experience and are in accordance with valid legal regulations. They cannot be considered as a guarantee of suitability and usability of the product for a specific application.

The packaging must be provided with a tangible warning for the blind. The package must be equipped with a child-proof cap.