® Roth

Inhibitor Cocktail Standard for biochemistry

article number: **3743** Version: **2.0 en** Replaces version of: 2015-09-23 Version: (1)

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

1.1 Product identifier

Identification of the substance

Article number

Registration number (REACH)

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not relevant (mixture)

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

Do not use for products which come into direct contact with the skin. Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment sheet:

e-mail (competent person):

sicherheit@carlroth.de

1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.1I	Acute toxicity (inhal.)	4	Acute Tox. 4	H332
3.2	Skin corrosion/irritation	1C	Skin Corr. 1C	H314
3.3	Serious eye damage/eye irritation	1	Eye Dam. 1	H318
3.9	Specific target organ toxicity - repeated exposure	2	STOT RE 2	H373

date of compilation: 2015-09-23 Revision: 2021-12-14

according to Regulation (EC) No. 1907/2006 (REACH)



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For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis. Delayed or immediate effects can be expected after short or long-term exposure.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word Danger

Pictograms

GHS05, GHS07, GHS08

Hazard statements

H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
H373	May cause damage to organs (respiratory system) through prolonged or re- peated exposure (if inhaled)

Precautionary statements

Precautionary statements - prevention

P280 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statements - response

P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]
P304+P340	IF INHALED. Remove person to fresh air and keep comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310	Immediately call a POISON CENTER/doctor

Hazardous ingredients for labelling:

Ethylenediamine tetraacetic acid disodium salt dihydrate, 4-(2-Aminoethyl)benzenesulfonyl fluoride hydrochloride

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Symbol(s)

H314

Causes severe skin burns and eye damage.

	, , ,
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to
	do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
contains:	Ethylenediamine tetraacetic acid disodium salt dihydrate, 4-(2-Aminoethyl)benzenesulfonyl fluoride hydro- chloride

according to Regulation (EC) No. 1907/2006 (REACH)



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2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Ethylenediamine tet- raacetic acid disodi- um salt dihydrate	CAS No 6381-92-6 EC No 205-358-3	80 - < 100	Acute Tox. 4 / H332 STOT RE 2 / H373		
4-(2-Aminoethyl)ben- zenesulfonyl fluoride hydrochloride	CAS No 30827-99-7 EC No 608-547-2	5 - 10	Skin Corr. 1C / H314 Eye Dam. 1 / H318	HAN HANNE	
Leupeptin hemi- sulphate	CAS No 103476-89-7	< 0,1			
Pepstatin A	CAS No 26305-03-3 EC No 247-600-0	< 0,1			

Name of sub- stance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
Ethylenediam- ine tetraacetic acid disodium	CAS No 6381-92-6	-	-	1,6 ^{mg} /ı/4h	inhalation: dust/ mist
salt dihydrate	EC No 205-358-3				

For full text of abbreviations: see SECTION 16

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off immediately all contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

according to Regulation (EC) No. 1907/2006 (REACH)

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Following skin contact

After contact with skin, wash immediately with plenty of water. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

Following eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

Following ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

4.2 Most important symptoms and effects, both acute and delayed

Corrosion, Risk of blindness, Gastric perforation, Risk of serious damage to eyes

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water, foam, dry extinguishing powder, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂), May produce toxic fumes of carbon monoxide if burning.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus. Wear full chemical protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe dust.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

according to Regulation (EC) No. 1907/2006 (REACH)

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6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains. Take up mechanically.

Advice on how to clean up a spill

Take up mechanically. Control of dust.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle and open container with care. Avoid dust formation. Clear contaminated areas thoroughly.

Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place. Keep in a cool place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: -20 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Coun try	Name of agent	CAS No	Identifi- er	TWA [mg/ m³]	STEL [mg/ m³]	Ceil- ing-C [mg/ m ³]	Nota- tion	Source
GB	dust		WEL	10			i	EH40/2005
GB	dust		WEL	4			r	EH40/2005

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Notation	
Ceiling-C	Ceiling value is a limit value above which exposure should not occur
r	Inhalable fraction Respirable fraction
STEL	Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-
	minute period (unless otherwise specified)
TWA	Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture

	•					
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
Ethylenediamine tetraacetic acid dis- odium salt di- hydrate	6381-92-6	DNEL	1,5 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects
Ethylenediamine tetraacetic acid dis- odium salt di- hydrate	6381-92-6	DNEL	3 mg/m³	human, inhalat- ory	worker (industry)	acute - local ef- fects

Relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time
Ethylenediamine tetraacetic acid dis- odium salt di- hydrate	6381-92-6	PNEC	2,2 ^{mg} / _l	aquatic organ- isms	freshwater	short-term (single instance)
Ethylenediamine tetraacetic acid dis- odium salt di- hydrate	6381-92-6	PNEC	0,22 ^{mg} / _l	aquatic organ- isms	marine water	short-term (single instance)
Ethylenediamine tetraacetic acid dis- odium salt di- hydrate	6381-92-6	PNEC	43 ^{mg} / _l	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection. Wear face protection.

Skin protection



according to Regulation (EC) No. 1907/2006 (REACH)

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hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

NBR (Nitrile rubber)

material thickness

>0,11 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	solid
Form	powder
Colour	white
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined
Flash point	not applicable
Auto-ignition temperature	not determined
Decomposition temperature	not relevant

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artici		
	pH (value)	4 – 6 (in aqueous solution: 50 ^g / _l , 20 °C)
	Kinematic viscosity	not relevant
	Solubility(ies)	
	Water solubility	(soluble)
	Partition coefficient	
	Partition coefficient n-octanol/water (log value):	this information is not available
	Vapour pressure	not determined
	Density and/or relative density	
	Density	not determined
	Relative vapour density	information on this property is not available
	Particle characteristics	No data available.
	Other safety parameters	
	Oxidising properties	none
9.2	Other information	
	Information with regard to physical hazard classes:	hazard classes acc. to GHS (physical hazards): not relevant
	Other safety characteristics:	There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

according to Regulation (EC) No. 1907/2006 (REACH)



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SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Harmful if inhaled.

Acute toxicity estimate (ATE) of components of the mixture				
Name of substance	CAS No	Exposure route	ΑΤΕ	
Ethylenediamine tetraacetic acid disodium salt dihydrate	6381-92-6	inhalation: dust/mist	1,6 ^{mg} / _l /4h	

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Ethylenediamine tetraacetic acid dis- odium salt dihydrate	6381-92-6	oral	LD50	2.800 ^{mg} / _{kg}	rat
Pepstatin A	26305-03-3	oral	LD50	>2.000 ^{mg} / _{kg}	rat

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

May cause damage to organs (respiratory system) through prolonged or repeated exposure (if inhaled).

Hazard category	Target organ	Exposure route
2	respiratory system	if inhaled

according to Regulation (EC) No. 1907/2006 (REACH)



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Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects)

• If in eyes

causes burns, Causes serious eye damage, risk of blindness

• If inhaled

Inhalation of dust may cause irritation of the respiratory system

• If on skin

causes severe burns, causes poorly healing wounds

Other information

none

11.2 Endocrine disrupting properties

None of the ingredients are listed.

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture						
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time	
Ethylenediamine tet- raacetic acid disodi- um salt dihydrate	6381-92-6	LC50	41 ^{mg} / _l	bluegill (Lepomis mac- rochirus)	96 h	
Ethylenediamine tet- raacetic acid disodi- um salt dihydrate	6381-92-6	EC50	610 ^{mg} / _l	daphnia magna	24 h	

Aquatic toxicity (chronic) of components of the mixture

Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
Ethylenediamine tet- raacetic acid disodi- um salt dihydrate	6381-92-6	EC50	56 ^{mg} /l	Pseudomonas putida	8 h

Biodegradation

Data are not available.

12.2 Process of degradability

Data are not available.

according to Regulation (EC) No. 1907/2006 (REACH)



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12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Ethylenediamine tetraacetic acid disodium salt dihydrate	6381-92-6	1,8		

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

- **12.6 Endocrine disrupting properties** None of the ingredients are listed.
- 12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN 3261
IMDG-Code	UN 3261
ICAO-TI	UN 3261
UN proper shipping name	
ADR/RID/ADN	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

14.2

according to Regulation (EC) No. 1907/2006 (REACH)

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	IMDG-Code	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
	ICAO-TI	Corrosive solid, acidic, organic, n.o.s.
	Technical name (hazardous ingredients)	4-(2-Aminoethyl)benzenesulfonyl fluoride hydro- chloride
14.3	Transport hazard class(es)	
	ADR/RID/ADN	8
	IMDG-Code	8
	ICAO-TI	8
14.4	Packing group	
	ADR/RID/ADN	III
	IMDG-Code	III
	ICAO-TI	III
14.5	Environmental hazards	non-environmentally hazardous acc. to the dan- gerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and information	l inland waterway (ADR/RID/ADN) - Additional
Proper shipping name	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
Particulars in the transport document	UN3261, CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S., (contains: 4-(2-Aminoethyl)benzenesulf- onyl fluoride hydrochloride), 8, III, (E)
Classification code	C4
Danger label(s)	8
Special provisions (SP)	274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
Transport category (TC)	3
Tunnel restriction code (TRC)	E
Hazard identification No	80
Emergency Action Code	2X

according to Regulation (EC) No. 1907/2006 (REACH)



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International Maritime Dangerous Goods Code	(IMDG) - Additional information
Proper shipping name	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
Particulars in the shipper's declaration	UN3261, CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S., (contains: 4-(2-Aminoethyl)benzenesulf- onyl fluoride hydrochloride), 8, III
Marine pollutant	-
Danger label(s)	8
Special provisions (SP)	223, 274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
EmS	F-A, S-B
Stowage category	A
Segregation group	1 - Acids
International Civil Aviation Organization (ICAO	-IATA/DGR) - Additional information
Proper shipping name	Corrosive solid, acidic, organic, n.o.s.
Particulars in the shipper's declaration	UN3261, Corrosive solid, acidic, organic, n.o.s., (contains: 4-(2-Aminoethyl)benzenesulfonyl fluor- ide hydrochloride), 8, III
Danger label(s)	8
Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

none of the ingredients are listed

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list None of the ingredients are listed.

Seveso Directive

according to Regulation (EC) No. 1907/2006 (REACH)

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2012/18/EU (Seveso III)					
Νο	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements	Notes		
	not assigned				

Deco-Paint Directive

	VOC content	0 %
--	-------------	-----

Industrial Emissions Directive (IED)

VOC content	0 %
-------------	-----

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
4-(2-Aminoethyl)benzenesulfonyl fluoride hydrochloride	Organohalogen compounds and substances which may form such compounds in the aquatic envir- onment		A)	
Ethylenediamine tetraacetic acid disodium salt dihydrate	Metals and their compounds		A)	

Legend

A) Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

none of the ingredients are listed

Regulation on drug precursors

none of the ingredients are listed

Regulation on substances that deplete the ozone layer (ODS)

none of the ingredients are listed

Regulation concerning the export and import of hazardous chemicals (PIC)

none of the ingredients are listed

Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

according to Regulation (EC) No. 1907/2006 (REACH)



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National inventories

Country	Inventory	Status
AU	AICS	not all ingredients are listed
CA	DSL	not all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	not all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed

Legend

AICS	Australian Inventory of Chemical Substances
CICR	Chemical Inventory and Control Regulation
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
TCSI	Taiwan Chemical Substance Inventory

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Alignment to regulation: Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.1		Classification according to Regulation (EC) No 1272/2008 (CLP): change in the listing (table)	yes
2.1	Remarks: For full text of H-phrases: see SECTION 16.		yes
2.1	Remarks: For full text of R-phrases and Hazard- and EU Hazard-statements: see SECTION 16.		yes
2.1		The most important adverse physicochemical, human health and environmental effects: Skin corrosion produces an irreversible dam- age to the skin; namely, visible necrosis through the epidermis and into the dermis. Delayed or immediate effects can be expected after short or long-term exposure.	yes

according to Regulation (EC) No. 1907/2006 (REACH)



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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.2		Pictograms: change in the listing (table)	yes
2.2		Precautionary statements - response: change in the listing (table)	yes
2.2	Hazardous ingredients for labelling: Ethylenedinitrilotetraacetic acid disodium salt dihydrate, 4-(2-Aminoethyl)-benzylsulphonyl flu- oride hydrochloride	Hazardous ingredients for labelling: Ethylenediamine tetraacetic acid disodium salt dihydrate, 4-(2-Aminoethyl)benzenesulfonyl flu- oride hydrochloride	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2	contains: Ethylenedinitrilotetraacetic acid disodium salt dihydrate, 4-(2-Aminoethyl)-benzylsulphonyl flu- oride hydrochloride	contains: Ethylenediamine tetraacetic acid disodium salt dihydrate, 4-(2-Aminoethyl)benzenesulfonyl flu- oride hydrochloride	yes
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations		
Acute Tox.	Acute toxicity		
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de naviga- tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In- land Waterways)		
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)		
ADR/RID/ADN	Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN)		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
BOD	Biochemical Oxygen Demand		
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)		
Ceiling-C	Ceiling value		
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures		
COD	Chemical oxygen demand		
DGR	Dangerous Goods Regulations (see IATA/DGR)		
DNEL	Derived No-Effect Level		
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval		

according to Regulation (EC) No. 1907/2006 (REACH)



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Abbr.	Descriptions of used abbreviations
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an ident fier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during specified time interval
log KOW	n-Octanol/water
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
SVHC	Substance of Very High Concern
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

according to Regulation (EC) No. 1907/2006 (REACH)

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Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H373	May cause damage to organs (respiratory system) through prolonged or repeated exposure (if inhaled).

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.