

SECTION 2: Hazards identification

2.1	2.1 Classification of the substance or mixture Skin irritation, (Category 2)H315: Causes skin irritation.	
	Serious eye damage, (Category 1)	H318: Causes serious eye damage.
	Skin sensitization, (Category 1)	H317: May cause an allergic skin reaction.
	Reproductive toxicity, (Category 1B)	H360FD: May damage fertility. May damage the unborn child.
	Specific target organ toxicity - single exposure, (Category 2), Immune system	H371: May cause damage to organs.

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Page 1 of 40



2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

EZ

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Pictogram

Signal Word	Danger
Hazard Statements H315 H317 H318 H360FD H371	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May damage fertility. May damage the unborn child. May cause damage to organs (Immune system).
Precautionary Statements P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/ doctor.
Supplemental Hazard Statements	none
	Restricted to professional users.

Restricted to professional users.

Reduced Labeling (<= 125 ml) Pictogram

licogram	
Signal Word	Danger
Hazard Statements H317 H318 H360FD	May cause an allergic skin reaction. Causes serious eye damage. May damage fertility. May damage the unborn child.
Precautionary Statements P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352 P305 + P351 + P338	IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

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Page 2 of 40



2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component		Classification	Concentration
quinoline-4,6-diol			
CAS-No.	3517-61-1	Acute Tox. 4; Eye Dam. 1; H302, H318	>= 1 - < 3 %
	*		
3-Hydroxy-DL-kyr	nurenine		
CAS-No. EC-No.	484-78-6 617-574-9 *	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
3-Hydroxybutyric	acid		
CAS-No. EC-No.	300-85-6 206-099-9 *	Skin Corr. 1B; Eye Dam. 1; H314, H318	>= 1 - < 3 %
(+/-)-4-(1, 2-Diby)	vdroxyethyl)pyrocate	chol	
CAS-No. EC-No.	28822-73-3 249-260-9 *	Eye Irrit. 2; H319	>= 1 - < 10 %
Theobromine			
CAS-No. EC-No.	83-67-0 201-494-2	Acute Tox. 4; Eye Irrit. 2; H302, H319	>= 1 - < 10 %
	*		
	osphoribose sodium		
CAS-No.	68414-18-6	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
	*		

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Page 3 of 40

Oxalic acid dihydra	te		
CAS-No. EC-No. Index-No. Registration number	6153-56-6 205-634-3 607-006-00-8 01-2119534576-33- XXXX	Acute Tox. 4; Eye Dam. 1; H302, H312, H318	>= 1 - < 3 %
Mesotartaric acid			
CAS-No. EC-No.	5990-63-6 205-696-1 *	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
Maleamic acid			
CAS-No. EC-No.	557-24-4 209-163-4 *	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
(R)-adrenaline			
CAS-No. EC-No.	51-43-4 200-098-7	Acute Tox. 3; Acute Tox. 2; H301, H331, H310	>= 1 - < 10 %
	*		
N8-Acetylspermidir			
CAS-No.	34450-15-2 *	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
(26) 2 amine 4 (6	-methylsulfonimidoyl) b	utancia acid	L
CAS-No. EC-No.	15985-39-4 629-483-1 *	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
2' Deexwertiding 5'	dinkeenkete eedium		
CAS-No.	*	Acute Tox. 3; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H301, H331, H311, H315, H319, H335	>= 1 - < 10 %
N N'-Pentane-1 5-d	liyldiammonium dichlor	ide	
CAS-No.	1476-39-7	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	216-022-0	STOT SE 3; H315, H319, H335	%
Choline hydroxide		•	
CAS-No. EC-No.	123-41-1 204-625-1	Skin Corr. 1A; Eye Dam. 1; H314, H318	>= 1 - < 3 %
	*		

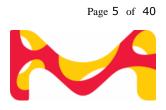
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Page 4 of 40

2-Methoxyethanol	Included in the Candidate	List of Substances of Very Hig	h Concern
	Regulation (EC) No. 1907/		in concern
CAS-No.	109-86-4	Flam. Liq. 3; Acute Tox. 4;	>= 1 - < 10
EC-No.	203-713-7	Repr. 1B; STOT SE 1;	%
			70
Index-No.	603-011-00-4	STOT RE 2; H226, H302,	
Registration	01-2119494721-33-	H332, H312, H360FD,	
number	XXXX	H370, H373	
N1-Acetylspermine CAS-No.	77928-70-2	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
	77520 70 2	STOT SE 3; H315, H319, H335	%
	*		
mercaptamine			
CAS-No.	60-23-1	Acute Tox. 4; Skin Irrit. 2;	>= 1 - < 10
EC-No.	200-463-0	Eye Irrit. 2; STOT SE 3;	%
20 1101	200 100 0	H302, H315, H319, H335	
	*	ענוין, הזנה, הזע, הגען, האטנוין האטניין	
(-)-5-hydroxy-L-try	votophan		
CAS-No.	4350-09-8	Acute Tox. 3; H301	>= 1 - < 10
EC-No.	224-411-1		%
LC-NO.	224-411-1		70
	*		
(S)-2-Hydroxybuty	ric acid		
CAS-No.	3347-90-8	Skin Irrit. 2; Eye Dam. 1;	>= 1 - < 3 %
		STOT SE 3; H315, H318,	
	*	H335	
Oxfenicine			1
CAS-No.	32462-30-9	Acute Tox. 4; Skin Irrit. 2;	>= 1 - < 10
EC-No.	251-061-7	Eye Irrit. 2; STOT SE 3;	%
		H302, H315, H319, H335	
	*		
	anoate hydrochloride		1
CAS-No.	13031-60-2	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	629-526-4	STOT SE 3; H315, H319,	%
		H335	
	*		
1,5,10-triazadecan			
CAS-No.	124-20-9	Skin Corr. 1B; Eye Dam.	>= 1 - < 3 %
EC-No.	204-689-0	1; H314, H318	
	*		
acetylcysteine		1	1
CAS-No.	616-91-1	Eye Irrit. 2; H319	>= 1 - < 10
EC-No.	210-498-3		%
	210-490-2		-70
Registration			
number	01 <u>010766167</u> /7		1
number	01-2120766167-47- XXXX		

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Monophosphothia	amine dihydrate		
CAS-No.	273724-21-3	Skin Sens. 1; H317	>= 1 - < 10
EC-No.	208-536-9		%
	*		
cocarboxylase (cl	hloride)		
CAS-No.	154-87-0	Skin Sens. 1; H317	>= 1 - < 10
EC-No.	205-836-1		%
	*		
2-Amino-2-methy	/lpropionic acid		
CAS-No.	62-57-7	Eye Irrit. 2; H319	>= 1 - < 10
EC-No.	200-544-0		%
	*		
(S)-β-Amino-1H-	imidazole-4-propanol (
CAS-No.	1596-64-1	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	216-482-2	STOT SE 3; H315, H319, H335	%
	*		
norleucine			
CAS-No.	327-57-1	Skin Sens. 1; H317	>= 1 - < 10
EC-No.	206-321-4		%
	*		
6-hydroxynicotin	ic acid		
CAS-No.	5006-66-6	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	225-682-9	STOT SE 3; H315, H319,	%
	*	H335	
2-Aminobenzenes	sulphonic acid		
CAS-No.	88-21-1	Skin Corr. 1B; H314	>= 1 - < 3 %
EC-No.	201-810-9		
	*		
	<u></u>		

*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, or the annual tonnage does not require a registration.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

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Page 6 of 40



In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

- **4.2 Most important symptoms and effects, both acute and delayed** The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
- **4.3 Indication of any immediate medical attention and special treatment needed** No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus Hydrogen chloride gas Hydrogen iodide Potassium oxides Sodium oxides Cobalt/cobalt oxides Calcium oxide Mixture with combustible ingredients. Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Use water spray to cool unopened containers. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of

Sigma- LSMLS04

Page 7 of 40



vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections 6.4

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Work under hood. Do not inhale substance/mixture.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place. Keep locked up or in an area accessible only to qualified or authorized persons. Storage stabilityRecommended storage temperature

-20 °C

Storage class

Storage class (TRGS 510): 3: Flammable liquids

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Specific end use(s) 7.3

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. protective clothing

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P3

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Do not let product enter drains.

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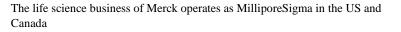
SECTION 9: Physical and chemical properties 9.1 Information on basic physical and chemical properties

a)Physical statesolidb)ColorNo data availablec)OdorNo data availabled)Melting point/freezing pointNo data availablee)Initial boiling point and boiling rangeNo data availablef)Flammability (solid, gas)No data availableg)Upper/lower flammability or explosive limitsNo data availableh)Flash pointNo data availablei)Autoignition temperatureNo data availablej)Decomposition temperatureNo data availablek)pHNo data availablem)Water solubilityNo data availablen)ViscosityViscosity, kinematic: No data availablen)Partition coefficient: n-octanol/waterNo data availablep)DensityNo data availablep)DensityNo data availablep)Particle characteristicsNo data availableq)Relative vapor densityNo data availableq)Relative vapor densityNo data availableq)Particle characteristicsD10 = 0.53 µm ± 0.008 µm D90 = 51.59 µm ± 0.062 µm D90 = 51.59 µm ± 0.093 µm Measurement method: ISO 13320r)Particle characteristicsNo data available	Inf	ormation on basic pl	nysical and chemical properties
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	r)		No data available

- s) Explosive properties No data available
- t) Oxidizing properties No data available

Sigma- LSMLS04

Page 10 of 40





SECTION 10: Stability and reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions Violent reactions possible with: Strong oxidizing agents

10.4 Conditions to avoid

Heat, flames and sparks. no information available

- **10.5 Incompatible materials** No data available
- **10.6 Hazardous decomposition products** In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity

Acute toxicity estimate Oral - > 2,000 mg/kg (Calculation method) Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Acute toxicity estimate Inhalation - 4 h - > 5 mg/l - dust/mist(Calculation method)

Symptoms: Possible symptoms:, mucosal irritations Acute toxicity estimate Dermal - > 2,000 mg/kg (Calculation method)

Skin corrosion/irritation

Remarks: Mixture causes skin irritation.

Serious eye damage/eye irritation Remarks: Mixture causes serious eye damage.

Respiratory or skin sensitization Mixture may cause an allergic skin reaction.

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity

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Page 11 of 40



May harm the unborn child. May impair fertility.

Specific target organ toxicity - single exposure Mixture may cause damage to organs. - Immune system

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

11.2 Additional Information

Endocrine disrupting properties

Product:

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

Components

quinoline-4,6-diol

Acute toxicity

Acute toxicity estimate Oral - 500.1 mg/kg (Expert judgment) Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc. Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

Remarks: Causes serious eye damage. The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

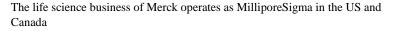
No data available

Carcinogenicity

No data available

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Page 12 of 40





Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

3-Hydroxy-DL-kynurenine

Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation Remarks: Causes skin irritation.

Serious eye damage/eye irritation Remarks: Causes serious eye irritation.

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

3-Hydroxybutyric acid

Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation Remarks: Causes serious eye damage.

Respiratory or skin sensitization No data available

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Page 13 of 40



Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

(+/-)-4-(1,2-Dihydroxyethyl)pyrocatechol

Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

Remarks: (in analogy to similar products) The value is given in analogy to the following substances: Pyrocatechol

Serious eye damage/eye irritation Remarks: (in analogy to similar products) The value is given in analogy to the following substances: Pyrocatechol

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

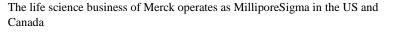
Theobromine

Acute toxicity

LD50 Oral - Rat - 1,265 mg/kg Remarks: (RTECS)

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Page 14 of 40





Acute toxicity estimate Oral - 1,265 mg/kg (ATE value derived from LD50/LC50 value) Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE) Result: No skin irritation - 15 min (OECD Test Guideline 439)

Serious eye damage/eye irritation

Eyes - Chicken eye Result: Eye irritation - 10 s (OECD Test Guideline 438)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Ames test Test system: S. typhimurium Result: negative

Carcinogenicity

No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

Adenosine 5'-diphosphoribose sodium salt

Acute toxicity

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

Skin corrosion/irritation Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity

No data available

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Page 15 of 40



Reproductive toxicity

No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

Oxalic acid dihydrate

Acute toxicity

LD50 Oral - Rat - 375 mg/kg Remarks: (IUCLID) The value is given in analogy to the following substances: Oxalic acid Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Symptoms: Possible damages:, mucosal irritations Acute toxicity estimate Dermal - 1,100.1 mg/kg (Expert judgment)

Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation (OECD Test Guideline 404) Remarks: The value is given in analogy to the following substances: Oxalic acid

Serious eye damage/eye irritation

Eyes - Rabbit Result: Irreversible effects on the eye (OECD Test Guideline 405) Remarks: The value is given in analogy to the following substances: Oxalic acid

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429) Remarks: The value is given in analogy to the following substances: Oxalic acid

Germ cell mutagenicity

Test Type: Ames test Test system: Salmonella typhimurium Result: negative Remarks: The value is given in analogy to the following substances: Oxalic acid Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster lung cells Result: negative Remarks: The value is given in analogy to the following substances: Oxalic acid

Carcinogenicity

No data available

Reproductive toxicity

No data available

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Page 16 of 40



Specific target organ toxicity - single exposure

Acute oral toxicity - Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Acute inhalation toxicity - Possible damages:, mucosal irritations

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

Mesotartaric acid

Acute toxicity

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

Maleamic acid

Acute toxicity

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

Skin corrosion/irritation Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

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Page 17 of 40



Germ cell mutagenicity No data available

Carcinogenicity

No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

(R)-adrenaline

Acute toxicity

Acute toxicity estimate Oral - 100.1 mg/kg (Expert judgment) Acute toxicity estimate Inhalation - 4 h - 0.51 mg/l - dust/mist (Expert judgment) Acute toxicity estimate Dermal - 50.1 mg/kg (Expert judgment)

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

No data avallable

N8-Acetylspermidine dihydrochloride

Acute toxicity

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

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Page 18 of 40



LD50 Intraperitoneal - Mouse - 820 mg/kg Remarks: Behavioral:Convulsions or effect on seizure threshold. Behavioral:Change in motor activity (specific assay). Lungs, Thorax, or Respiration:Other changes.

Skin corrosion/irritation Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

(2S)-2-amino-4-(S-methylsulfonimidoyl) butanoic acid

Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation Remarks: Causes skin irritation.

Serious eye damage/eye irritation Remarks: Causes serious eye irritation.

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

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Page 19 of 40



Aspiration hazard

No data available

2'-Deoxycytidine 5'-diphosphate sodium

Acute toxicity

Oral: No data available LD50 Oral - 100 mg/kg LC50 Inhalation - 4 h - 0.51 mg/l - dust/mist (Acute toxicity estimate) LD50 Dermal - 300 mg/kg

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

N,N'-Pentane-1,5-diyldiammonium dichloride

Acute toxicity

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

Skin corrosion/irritation Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

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Page 20 of 40



Reproductive toxicity

No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

Choline hydroxide

Acute toxicity

LD50 Oral - Rat - 11,000 mg/kg Remarks: (in analogy to similar products) (ECHA) Inhalation: No data available Dermal: No data available LD50 Intravenous - Mouse - 21.4 mg/kg Remarks: Behavioral:Convulsions or effect on seizure threshold. Behavioral:Excitement. Lungs, Thorax, or Respiration:Dyspnea.

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity

Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Result: negative Test Type: Ames test Test system: S. typhimurium Result: negative

Carcinogenicity

No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard

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No data available

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Page 21 of 40



2-Methoxyethanol

Acute toxicity

LD50 Oral - Rabbit - 890 mg/kg Remarks: Behavioral:General anesthetic. Blood:Other hemolysis with or withot anemia. (RTECS) Symptoms: Risk of aspiration upon vomiting., Aspiration may cause pulmonary edema and pneumonitis. Acute toxicity estimate Oral - 890 mg/kg (ATE value derived from LD50/LC50 value) Acute toxicity estimate Inhalation - 4 h - 11 mg/l - vapor (Expert judgment) Symptoms: Irritations of mucous membranes LD50 Dermal - Rabbit - 1,280 mg/kg Remarks: (RTECS) Acute toxicity estimate Dermal - 1,280 mg/kg (ATE value derived from LD50/LC50 value)

Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation - 4 h (Directive 67/548/EEC, Annex V, B.4.)

Serious eye damage/eye irritation

Eyes - Rabbit Result: slight irritation (OECD Test Guideline 405)

Respiratory or skin sensitization

Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Result: negative Method: OECD Test Guideline 475 Species: Mouse - male Result: negative

Carcinogenicity

No data available

Reproductive toxicity

May damage the unborn child. May damage fertility.

Specific target organ toxicity - single exposure

Causes damage to organs. - Immune system Acute oral toxicity - Risk of aspiration upon vomiting., Aspiration may cause pulmonary edema and pneumonitis. Acute inhalation toxicity - Irritations of mucous membranes

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure. - thymus

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Page 22 of 40

Oral - Testes, thymus

Aspiration hazard

No data available

N1-Acetylspermine trihydrochloride

Acute toxicity

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

Skin corrosion/irritation Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

mercaptamine

Acute toxicity

LD50 Oral - Mouse - 625 mg/kg Inhalation: Irritating to respiratory system. Dermal: No data available

Skin corrosion/irritation Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

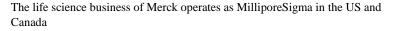
Respiratory or skin sensitization No data available

Germ cell mutagenicity

Test Type: Hamster Test system: ovary Remarks: Cytogenetic analysis

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Page 23 of 40





Test Type: Hamster Test system: ovary Remarks: Sister chromatid exchange Test Type: Ames test Result: Equivocal evidence. Test Type: Human Test system: fibroblast Remarks: Unscheduled DNA synthesis

Carcinogenicity

No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

(-)-5-hydroxy-L-tryptophan

Acute toxicity

LD50 Oral - Rat - 243 mg/kg Remarks: (RTECS) Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

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Page 24 of 40



(S)-2-Hydroxybutyric acid

Acute toxicity

Oral: No data available LD50 Oral - 2,500 mg/kg Inhalation: Irritating to respiratory system. Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

Oxfenicine

Acute toxicity

Oral: No data available LD50 Oral - 500.1 mg/kg Inhalation: Irritating to respiratory system. Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

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Page 25 of 40



Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

Methyl 4-aminobutanoate hydrochloride

Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

Remarks: Causes skin irritation.

Serious eye damage/eye irritation Remarks: Causes serious eye irritation.

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

1,5,10-triazadecane; spermidine

Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation Remarks: Causes skin burns.

Serious eye damage/eye irritation Remarks: Causes serious eye damage.

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

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Page 26 of 40



Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

acetylcysteine

Acute toxicity

LD50 Oral - Rat - 5,050 mg/kg Remarks: (RTECS) Symptoms: Nausea, Vomiting, Gastrointestinal discomfort Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE) Result: No skin irritation - 42 min (OECD Test Guideline 439)

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation. (ECHA)

Respiratory or skin sensitization No data available

Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure Acute oral toxicity - Nausea, Vomiting, Gastrointestinal discomfort

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

No data avallable

Monophosphothiamine dihydrate

Acute toxicity

LD50 Oral - Rat - male - 3,710 mg/kg Remarks: (ECHA)

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Page 27 of 40



(anhydrous substance) Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE) Result: No skin irritation - 42 min (OECD Test Guideline 439) Remarks: (anhydrous substance)

Serious eye damage/eye irritation

Eyes - Bovine cornea Result: No eye irritation - 4 h (OECD Test Guideline 437) Remarks: (anhydrous substance)

Respiratory or skin sensitization

In vitro study Result: positive (OECD Test Guideline 442C) Remarks: (anhydrous substance) KeratinoSens assay Result: positive (OECD Test Guideline 442D) Remarks: (anhydrous substance)

Germ cell mutagenicity

No data available Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative Remarks: (anhydrous substance)

Carcinogenicity

No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

cocarboxylase (chloride)

Acute toxicity

LD50 Oral - Rat - male - 3,710 mg/kg Remarks: The value is given in analogy to the following substances: thiamine monophosphate chloride Inhalation: No data available Dermal: No data available

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Page 28 of 40



LD50 Intravenous - Rat - 465 mg/kg LD50 Subcutaneous - Rat - 5,000 mg/kg

Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE) Result: No skin irritation - 42 min (OECD Test Guideline 439) Remarks: The value is given in analogy to the following substances: thiamine monophosphate chloride

Serious eye damage/eye irritation

Eyes - Bovine cornea Result: No eye irritation - 4 h (OECD Test Guideline 437) Remarks: The value is given in analogy to the following substances: thiamine monophosphate chloride

Respiratory or skin sensitization

In vitro study Result: positive (OECD Test Guideline 442C) Remarks: The value is given in analogy to the following substances: thiamine monophosphate chloride KeratinoSens assay Result: positive (OECD Test Guideline 442D)

Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative Remarks: The value is given in analogy to the following substances: thiamine monophosphate chloride

Carcinogenicity

No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

2-Amino-2-methylpropionic acid

Acute toxicity

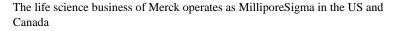
Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

No data available

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Page 29 of 40





Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

(S)-β-Amino-1H-imidazole-4-propanol dihydrochloride

Acute toxicity

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

Skin corrosion/irritation Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity

Test Type: Human Test system: lymphocyte Remarks: Cytogenetic analysis

Carcinogenicity

No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

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Page 30 of 40



norleucine

Acute toxicity Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

6-hydroxynicotinic acid

Acute toxicity

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

Skin corrosion/irritation Remarks: No data available

Remarks: NO data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

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Page 31 of 40



Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

2-Aminobenzenesulphonic acid

Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

SECTION 12: Ecological information

12.1 Toxicity

Mixture No data available

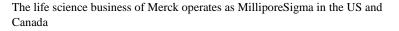
- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- **12.4 Mobility in soil** No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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Page 32 of 40





12.6 Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Very toxic to aquatic life with long lasting effects.

Components

quinoline-4,6-diol

No data available

3-Hydroxy-DL-kynurenine

No data available

3-Hydroxybutyric acid

No data available

(+/-)-4-(1,2-Dihydroxyethyl)pyrocatechol No data available

Theobromine

Toxicity to daphnia	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l -
and other aquatic	48 h
invertebrates	(OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)

Adenosine 5'-diphosphoribose sodium salt

No data available

Oxalic acid dihvdrate

Toxicity to fish	static test LC50 - Leuciscus idus (Golden orfe) - 160 mg/l - 48
	h Remarks: (IUCLID)
	The value is given in analogy to the following substances: Oxalic acid
Toxicity to daphnia and other aquatic invertebrates	- Daphnia magna (Water flea) - 162.2 mg/l - 48 h (OECD Test Guideline 202) Remarks: The value is given in analogy to the following substances: Oxalic acid

Mesotartaric acid

No data available

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Page 33 of 40

Maleamic acid

No data available

(R)-adrenaline

No data available

N8-Acetylspermidine dihydrochloride No data available

(2S)-2-amino-4-(S-methylsulfonimidoyl) butanoic acid

No data available

2'-Deoxycytidine 5'-diphosphate sodium No data available

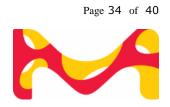
N,N'-Pentane-1,5-diyldiammonium dichloride

No data available

Choline hydroxide

	Toxicity to fish	static test LC50 - Leuciscus idus (Golden orfe) - > 10,000 mg/l - 96 h (DIN 38412) static test NOEC - Leuciscus idus (Golden orfe) - 10,000 mg/l - 96 h (DIN 38412)
	Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h (Regulation (EC) No. 440/2008, Annex, C.2)
	Toxicity to algae	static test EC50 - Desmodesmus subspicatus (green algae) - > 500 mg/l - 72 h (DIN 38412)
	Toxicity to bacteria	static test EC50 - Pseudomonas putida - 132.8 mg/l - 17 h (DIN 38 412 Part 8)
	Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	static test LC50 - Daphnia magna (Water flea) - > 95.5 mg/l - 21 d (OECD Test Guideline 211)
2-Me	ethoxyethanol	
	Toxicity to fish	static test LC50 - Lepomis macrochirus (Bluegill sunfish) - > 10,000 mg/l - 96 h (OECD Test Guideline 203)
	Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - 27,000 mg/l - 48 h (ISO 6341)
	Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green

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algae) - 25,500 mg/l - 72 h
(ISO 8692)Toxicity to bacteriastatic test EC50 - activated sludge - > 1,000 mg/l - 3 h
(OECD Test Guideline 209)Toxicity to daphnia
and other aquatic
invertebrates(Chronic
toxicity)semi-static test NOEC - Daphnia magna (Water flea) - > 500
mg/l - 21 d
(OECD Test Guideline 211)

N1-Acetylspermine trihydrochloride

No data available

mercaptamine

No data available

(-)-5-hydroxy-L-tryptophan

No data available

(S)-2-Hydroxybutyric acid

No data available

Oxfenicine

No data available

Methyl 4-aminobutanoate hydrochloride

No data available

1,5,10-triazadecane; spermidine

No data available

acetylcysteine

Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - > 100 mg/l - 72 h (OECD Test Guideline 201)
	static test NOEC - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)
Monophosphothiamine d	ihvdrate
Toxicity to fish	static test LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h (OECD Test Guideline 203) Remarks: (anhydrous substance)
Toxicity to daphnia	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l -

(OECD Test Guideline 202)

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Page 35 of 40

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48 h

and other aquatic

invertebrates



Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green
	algae) - > 100 mg/l - 72 h
	(OECD Test Guideline 201)
	Remarks: (anhydrous substance)

cocarboxylase (chloride)

Toxicity to fish	static test LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h (OECD Test Guideline 203) Remarks: The value is given in analogy to the following substances: thiamine monophosphate chloride
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: thiamine monophosphate chloride

2-Amino-2-methylpropionic acid

No data available

(S)-β-Amino-1H-imidazole-4-propanol dihydrochloride No data available

norleucine

No data available

6-hydroxynicotinic acid No data available

2-Aminobenzenesulphonic acid

No data available

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Page 36 of 40

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport inform	ation			
14.1 UN number ADR/RID: -	IMDG: -	IATA: -		
14.2UN proper shipping name ADR/RID:Not dangerous goodsIMDG:Not dangerous goodsIATA:Not dangerous goods				
14.3 Transport hazard class(es ADR/RID: -	s) IMDG: -	IATA: -		
14.4 Packaging group ADR/RID: -	IMDG: -	IATA: -		
14.5 Environmental hazards ADR/RID: no	IMDG Marine pollutant: no	IATA: no		
14.6 Special precautions for user				
Further information				

Not classified as dangerous in the meaning of transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use

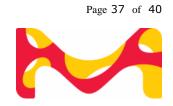
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the

export and import of dangerous chemicals

: 2-Methoxyethanol

: (–)-Nicotine 3-Indoleacetic acid

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Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements

H226	Flammable liquid and vapor.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful 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.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360FD	May damage fertility. May damage the unborn child.
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.

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Page 38 of 40

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM -American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. -Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Classification of the mixture		Classification procedure:
Skin Irrit.2	H315	Calculation method
Eye Dam.1	H318	Calculation method
Skin Sens.1	H317	Calculation method
Repr.1B	H360FD	Calculation method
STOT SE2	H371	Calculation method

Further information

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Page 39 of 40



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Page 40 of 40