

Safety Data Sheet

according to UK REACH Regulation

RASCOLiner SL423 AC

Revision date: 07.10.2024

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

1.1. Product identifier

RASCOLiner SL423 AC

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

Use of the substance/mixture

Catalyst

1.3. Details of the supplier of the safety data sheet

Company name: Rascor International AG

Street: Gewerbestrasse 4

Place: CH-8162 Steinmaur

Telephone: +41 (0)448571111

E-mail: info@rascor.com

E-mail (Contact person): labor@rascor.com

Internet: www.rascor.com

1.4. Emergency telephone

+41 (0)44 857 11 11 (8:00-16:00 Mo-Fr)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Acute Tox. 4; H302

Skin Irrit. 2; H315

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

ethanediol; ethylene glycol

Signal word: Warning

Pictograms:



Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

The mixture does not contain a vPvB substance (vPvB = very persistent, very bioaccumulative) or does not fall under Annex XIII of Regulation (EC) 1907/2006 (< 0.1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or does not fall under Annex XIII of Regulation (EC) 1907/2006 (< 0.1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0.1 %).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
107-21-1	ethanediol; ethylene glycol			75 - < 100 %
	203-473-3	603-027-00-1		
	Acute Tox. 4; H302			
80-70-6	1,1,3,3,-Tetramethylguanidin			1 - < 5 %
	201-302-7			
	Flam. Liq. 3, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, STOT SE 3; H226 H332 H314 H318 H336			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
107-21-1	203-473-3	ethanediol; ethylene glycol	75 - < 100 %
		dermal: LD50 = >3500 mg/kg; oral: LD50 = >7712 mg/kg	
80-70-6	201-302-7	1,1,3,3,-Tetramethylguanidin	1 - < 5 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1.5 mg/l (dusts or mists); oral: LD50 = 835 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Ensure that first aiders protect themselves!

Never give anything by mouth to an unconscious person!

After inhalation

Provide fresh air. Remove person from danger zone. Supply the person with fresh air and consult a doctor depending on the symptoms.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Wash thoroughly with plenty of soap and water, remove contaminated, soaked clothing immediately, consult a doctor if skin irritation (redness etc.) occurs.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Remove contact lenses.

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Rinse thoroughly with plenty of water for several minutes, consult a doctor if necessary.

After ingestion

Rinse mouth immediately and drink 1 glass of water. Medical treatment necessary. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

If applicable, delayed symptoms and effects can be found in section 11. or in the intake routes under section 4.1.

In certain cases, symptoms of poisoning may only appear after a longer period of time/after several hours.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated:

Nitrogen oxides (NOx)

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.

Do not allow entering drains or surface water. Personal protective equipment see section 8. Do not inhale explosion and combustion gases.

Self-contained breathing apparatus. Depending on the size of the fire

Full protection if necessary.

Cool endangered containers with water.

Dispose of contaminated extinguishing water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as described in section 8 to prevent contamination.

Ensure adequate ventilation, remove sources of ignition.

In case of solid or powdery products, avoid dust formation. Leave the danger zone if possible, use existing emergency plans if necessary. Ensure adequate ventilation.

Avoid contact with eyes and skin. Be aware of the risk of slipping.

For emergency responders

Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

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6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Ensure good room ventilation. Avoid contact with eyes and skin.

Do not eat, drink, smoke or store food in the work area. Observe the information on the label and the instructions for use.

Advice on protection against fire and explosion

The general hygiene measures for handling chemicals must be applied. Wash hands before breaks and at the end of work.

Keep away from food, drink and animal feed.

Remove contaminated clothing and protective equipment before entering areas where food is eaten.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Do not store the product in passageways and stairways. Store product only in original packaging and closed. Store at room temperature.

Protect from frost.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Intermediates Processing aids

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL

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DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
107-21-1	ethanediol; ethylene glycol			
Worker DNEL, long-term		inhalation	local	35 mg/m³
Worker DNEL, long-term		dermal	systemic	106 mg/kg bw/day
80-70-6	1,1,3,3,-Tetramethylguanidin			
Consumer DNEL, long-term		oral	systemic	0,17 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,17 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	0,33 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	1,2 mg/m³
Consumer DNEL, long-term		inhalation	systemic	0,3 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment	Value	
107-21-1	ethanediol; ethylene glycol	
Freshwater	10 mg/l	
Marine water	1 mg/l	
Freshwater sediment	37 mg/l	
Marine sediment	3,7 mg/l	
Micro-organisms in sewage treatment plants (STP)	199,5 mg/l	
80-70-6	1,1,3,3,-Tetramethylguanidin	
Freshwater	0,1 mg/l	
Marine water	0,01 mg/l	
Freshwater sediment	0,64 mg/kg	
Marine sediment	0,064 mg/kg	
Micro-organisms in sewage treatment plants (STP)	1,7 mg/l	
Soil	0,069 mg/kg	

8.2. Exposure controls



Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles. Safety goggles (EN 166) tight-fitting with side shields, in case of risk of splashes.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the

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specific working place concentration and quantity of hazardous substances. 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. Chemical-resistant protective gloves (EN ISO 374). If necessary Protective gloves made of butyl (EN ISO 374) Protective gloves made of nitrile (EN ISO 374). Protective gloves made of PVC (EN ISO 374) Hand protection cream recommended.

The breakthrough times determined in accordance with EN 16523-1 were not carried out under practical conditions. A maximum wearing time corresponding to 50% of the breakthrough time is recommended.

Skin protection - Other protective measures:

Protective work clothing (e.g. safety shoes EN ISO 20345, long-sleeved work clothing).

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Normally not necessary.

Thermal hazards

If applicable, they are mentioned under personal protective measures (eye/face protection, skin protection, respiratory protection).

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	yellow green
Odour:	No information available.

Test method

Melting point/freezing point:	No information available.
Boiling point or initial boiling point and boiling range:	No information available.
Flammability:	Non-flammable.
Lower explosion limits:	No information available.
Upper explosion limits:	No information available.
Flash point:	No information available.
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value (at 20 °C):	6 DIN 19268
Viscosity / kinematic:	No information available.
Water solubility:	easily soluble
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	No information available.
Density (at 20 °C):	1.016 g/cm ³ ISO 2811
Relative vapour density:	not determined
Particle characteristics:	not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

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Viscosity / dynamic:
(at 20 °C)

4-8 mPa·s ISO 2555

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

Safe handling: see section 7

Avoid contact with: Strong acids. Strong bases. Strong oxidising agents.

Fluorine

Ammonia (NH₃)

other halogenated solvents and solvent mixtures

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 511.8 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) 666.7 mg/l; ATE (inhalation dust/mist) 90.91 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol; ethylene glycol				
	oral	LD50 >7712 mg/kg	Rat		
	dermal	LD50 >3500 mg/kg	Mouse		
80-70-6	1,1,3,3,-Tetramethylguanidin				
	oral	LD50 835 mg/kg	Rat		
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1.5 mg/l			

Irritation and corrosivity

Causes skin irritation. (On basis of test data)

Causes serious eye irritation. (On basis of test data)

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

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Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
107-21-1	ethanediol; ethylene glycol					
	Acute fish toxicity	LC50 mg/l	72860	96 h	Pimephales promelas (fathead minnow)	
	Acute algae toxicity	ErC50 mg/l	6500	96 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Daphnia magna (Big water flea)	
80-70-6	1,1,3,3,-Tetramethylguanidin					
	Algae toxicity	NOEC	100 mg/l	2 d	Pseudokirchneriella subcapitata	
	Acute bacteria toxicity	(EC50 mg/l)	350	3 h		

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	ethanediol; ethylene glycol	-1,36

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

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No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

2004/42/EC (VOC): 97.7 % (992.632 g/l)

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

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Abbreviations and acronyms

CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 CAS: Chemical Abstracts Service
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).
 Flam. Liq: Flammable liquids
 Acute Tox: Acute toxicity
 Skin Corr: Skin corrosion
 Skin Irrit: Skin irritation
 Eye Dam: Eye damage
 Eye Irrit: Eye irritation
 STOT SE: Specific target organ toxicity - single exposure

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Irrit. 2; H315	On basis of test data
Eye Irrit. 2; H319	On basis of test data

Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.

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H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)