

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Caravan HighPower Cleaner

Revision date: 06.09.2023

Product code: 2015.

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

1.1. Product identifier

Caravan HighPower Cleaner

UFI: A256-6GY2-EUNY-X0GP

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

Use of the substance/mixture

Cleaner.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: igepa-chemie GmbH
Street: Mitterfeldstr. 7a
Place: D-93077 Bad Abbach
Telephone: +49 (0) 9405 – 9525-0
E-mail: info@igepa-chemie.de
Contact person: Konstantin Georgieff
Telefax: +49 (0) 9405 – 9525-25

1.4. Emergency telephone number:

Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240 (24h)

Further Information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.

Additional advice on labelling

Labelling for contents according to regulation (EC) No. 648/2004: Refer to chapter 3

2.3. Other hazards

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The substances in the mixture (> 0.1%) do not meet the PBT/vPvB criteria according to REACH, annex XIII. This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria. This product does not contain a substance (> 0,1 %) that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	Classification (Regulation (EC) No 1272/2008)	
97862-59-4	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts	1 - < 3 %
	931-296-8	01-2119488533-30
	Eye Dam. 1, Aquatic Chronic 3; H318 H412	
68439-46-3	Alcohols C9-11, ethoxylated	1 - < 3 %
	614-482-0	
	Acute Tox. 4, Eye Dam. 1; H302 H318	
141-43-5	2-aminoethanol, ethanolamine	0.5 - < 1 %
	205-483-3	603-030-00-8
	01-2119486455-28	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, STOT SE 3, Aquatic Chronic 3; H332 H312 H302 H314 H335 H412	
308062-28-4	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	0.3 - < 0.5 %
	931-292-6	01-2119490061-47
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 2; H302 H315 H318 H400 H411	
110-43-0	heptan-2-one, methyl amyl ketone	< 0.1 %
	203-767-1	606-024-00-3
	01-2119902391-49	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, STOT SE 3; H226 H332 H302 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	
97862-59-4	931-296-8	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts	1 - < 3 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = >5000 mg/kg Eye Dam. 1; H318: >= 10 - 100 Eye Irrit. 2; H319: >= 4 - < 10	
68439-46-3	614-482-0	Alcohols C9-11, ethoxylated	1 - < 3 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = 1378 mg/kg	
141-43-5	205-483-3	2-aminoethanol, ethanolamine	0.5 - < 1 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 2504 mg/kg; oral: LD50 = 1089 mg/kg STOT SE 3; H335: >= 5 - 100	
308062-28-4	931-292-6	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	0.3 - < 0.5 %
		oral: LD50 = 1064 mg/kg Aquatic Acute 1; H400: M=1	
110-43-0	203-767-1	heptan-2-one, methyl amyl ketone	< 0.1 %
		inhalation: LC50 = > 16,7 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1670 mg/kg	

Labelling for contents according to Regulation (EC) No 648/2004

< 5 % phosphonates, < 5 % amphoteric surfactants, < 5 % non-ionic surfactants, perfumes (Limonene).

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Further Information

Product does not contain listed SVHC substances > 0.1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

See sections 2 and 11

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

Carbon dioxide (CO₂). Dry extinguishing powder. Alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x). Phosphorus oxides.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Safe handling: see section 7

High slip hazard because of leaking or spilled product.

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

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For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

For containment

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

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

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

Wear suitable protective clothing. See section 8.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink or smoke. Wash hands before breaks and after work.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.
Recommended storage temperature: 20 °C
Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Occupational exposure limits

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
141-43-5	2-Aminoethanol	1	2.5		TWA (8 h)	
		3	7.6		STEL (15 min)	
5392-40-5	Citral (Inhalable Fraction and Vapour)	5	-		TWA (8 h)	
110-43-0	Heptan-2-one	50	238		TWA (8 h)	
		100	475		STEL (15 min)	
102-71-6	Triethanolamine	-	5		TWA (8 h)	

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
102-71-6	2,2',2''-nitrilotriethanol			
	Consumer DNEL, long-term	oral	systemic	3,3 mg/kg bw/day
	Worker DNEL, long-term	dermal	systemic	7,5 mg/kg bw/day
	Consumer DNEL, long-term	dermal	systemic	2,66 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	local	0,4 mg/m ³
	Worker DNEL, acute	inhalation	local	1 mg/m ³
	Worker DNEL, long-term	dermal	local	0,14 mg/cm ²
	Consumer DNEL, long-term	dermal	local	0,07 mg/cm ²
97862-59-4	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts			
	Consumer DNEL, long-term	inhalation	systemic	13,04 mg/m ³
	Consumer DNEL, long-term	dermal	systemic	7,5 mg/kg bw/day
	Consumer DNEL, long-term	oral	systemic	7,5 mg/kg bw/day
	Worker DNEL, long-term	inhalation	systemic	44 mg/m ³
	Worker DNEL, long-term	dermal	systemic	12,5 mg/kg bw/day
141-43-5	2-aminoethanol, ethanolamine			
	Worker DNEL, long-term	inhalation	systemic	1 mg/m ³
	Consumer DNEL, long-term	inhalation	systemic	0,18 mg/m ³
	Consumer DNEL, long-term	oral	systemic	1,5 mg/kg bw/day
	Consumer DNEL, long-term	dermal	systemic	1,5 mg/kg bw/day
	Worker DNEL, long-term	dermal	systemic	3 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	local	0,28 mg/m ³
	Worker DNEL, long-term	inhalation	local	0,51 mg/m ³
308062-28-4	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides			
	Worker DNEL, long-term	inhalation	systemic	6,2 mg/m ³
	Worker DNEL, long-term	dermal	systemic	11 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	systemic	1,53 mg/m ³
	Consumer DNEL, long-term	dermal	systemic	5,5 mg/kg bw/day
	Consumer DNEL, long-term	oral	systemic	0,44 mg/kg bw/day

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CAS No.	Substance	Exposure Route	Effect	Value
5392-40-5	citral			
Worker DNEL, long-term		inhalation	systemic	9 mg/m ³
Worker DNEL, long-term		dermal	systemic	1,7 mg/kg bw/day
Worker DNEL, long-term		dermal	local	0,14 mg/cm ²
Consumer DNEL, long-term		inhalation	systemic	2,7 mg/m ³
Consumer DNEL, long-term		dermal	systemic	1 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,6 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	0,14 mg/cm ²
110-43-0	heptan-2-one, methyl amyl ketone			
Worker DNEL, acute		inhalation	systemic	1516 mg/m ³
Worker DNEL, long-term		dermal	systemic	54,27 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	84,31 mg/m ³
Consumer DNEL, long-term		dermal	systemic	23,32 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	394,25 mg/m ³
Consumer DNEL, long-term		oral	systemic	23,32 mg/kg bw/day

PNEC values

CAS No	Substance	Environmental compartment	Value
102-71-6	2,2',2''-nitrioltriethanol		
Freshwater			0,32 mg/l
Marine water			0,032 mg/l
Freshwater sediment			1,7 mg/kg
Marine sediment			0,17 mg/kg
Micro-organisms in sewage treatment plants (STP)			10 mg/l
Soil			0,151 mg/kg
97862-59-4	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts		
Freshwater			0,013 mg/l
Marine water			0,001 mg/l
Freshwater sediment			11,1 mg/kg
Marine sediment			1,11 mg/kg
Micro-organisms in sewage treatment plants (STP)			3000 mg/l
Soil			0,85 mg/kg
141-43-5	2-aminoethanol, ethanolamine		
Freshwater			0,07 mg/l
Freshwater (intermittent releases)			0,028 mg/l
Marine water			0,007 mg/l
Freshwater sediment			0,357 mg/kg
Marine sediment			0,036 mg/kg
Micro-organisms in sewage treatment plants (STP)			100 mg/l
Soil			1,29 mg/kg
308062-28-4	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		

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Freshwater	0,034 mg/l
Freshwater (intermittent releases)	0,034 mg/l
Marine water	0,003 mg/l
Freshwater sediment	5,24 mg/kg
Marine sediment	0,524 mg/kg
Secondary poisoning	11,1 mg/kg
Micro-organisms in sewage treatment plants (STP)	24 mg/l
Soil	1,02 mg/kg
5392-40-5	citral
Freshwater	0,00678 mg/l
Freshwater (intermittent releases)	0,0678 mg/l
Marine water	0,000678 mg/l
Marine water (intermittent releases)	0,0678 mg/l
Freshwater sediment	0,125 mg/kg
Marine sediment	0,0125 mg/kg
Micro-organisms in sewage treatment plants (STP)	1,6 mg/l
Soil	0,0209 mg/kg
110-43-0	heptan-2-one, methyl amyl ketone
Freshwater	0,098 mg/l
Freshwater (intermittent releases)	0,982 mg/l
Marine water	0,01 mg/l
Freshwater sediment	1,89 mg/kg
Marine sediment	0,189 mg/kg
Micro-organisms in sewage treatment plants (STP)	12,5 mg/l
Soil	0,321 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). EN 166

Hand protection

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time \geq 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

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NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time \geq 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

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 selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.

Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

-Exceeding exposure limit values

-Insufficient ventilation and aerosol or mist formation

Suitable respiratory protective equipment: particulates filter device (DIN EN 143). type: P1-3

Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	green
Odour:	characteristic
Odour threshold:	not determined
Melting point/freezing point:	~-5 °C
Boiling point or initial boiling point and boiling range:	>100 °C
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not relevant
pH-Value (at 20 °C):	10,5
Viscosity / kinematic:	not determined
Water solubility:	miscible.
Solubility in other solvents	
not determined	
Dissolution rate:	not relevant
Partition coefficient n-octanol/water:	not relevant
Dispersion stability:	not relevant
Vapour pressure:	not determined
Density (at 20 °C):	1,06 g/cm ³

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Bulk density:	not relevant
Relative vapour density:	not determined
Particle characteristics:	not relevant

9.2. Other information

Information with regard to physical hazard classes

Explosive properties	
none	
Sustaining combustion:	Not sustaining combustion
Self-ignition temperature	
Solid:	not relevant
Gas:	not relevant
Oxidizing properties	
none	

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined
Solid content:	not determined
Sublimation point:	not relevant
Softening point:	not relevant
Pour point:	not relevant
Viscosity / dynamic:	not determined
Flow time:	not determined

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.
Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x). Phosphorus oxides.

SECTION 11: Toxicological information

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

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

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

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ATEmix calculated

ATE (oral) 86125 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
97862-59-4	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts				
	oral	LD50 >5000 mg/kg	Rat	REACH Dossier	
	dermal	LD50 >2000 mg/kg	Rat	REACH Dossier	
68439-46-3	Alcohols C9-11, ethoxylated				
	oral	LD50 1378 mg/kg	Rat	REACH Dossier	
	dermal	LD50 >2000 mg/kg	Rabbit	REACH Dossier	
141-43-5	2-aminoethanol, ethanolamine				
	oral	LD50 1089 mg/kg	Rat	REACH Dossier	OECD 401
	dermal	LD50 2504 mg/kg	Rabbit	REACH Dossier	OECD 402
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			
308062-28-4	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides				
	oral	LD50 1064 mg/kg	Rat	REACH Dossier	
110-43-0	heptan-2-one, methyl amyl ketone				
	oral	LD50 1670 mg/kg	Rat	GESTIS	
	dermal	LD50 > 2000 mg/kg	Rat	REACH Dossier	OECD Guideline 402
	inhalation (4 h) vapour	LC50 > 16,7 mg/l	Rat	REACH Dossier	OECD Guideline 403
	inhalation dust/mist	ATE 1,5 mg/l			

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts (CAS-No.: 97862-59-4):

In vitro mutagenicity/genotoxicity:

Method: OECD Guideline 476

Result: negative.

Literature information: REACH Dossier

Developmental toxicity/teratogenicity:

Method: OECD Guideline 408

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Species: Rat
Exposure route: oral
Result: NOEL >= 300/1000 mg/Kg
Literature information: REACH Dossier

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides:
In-vitro mutagenicity:
Method:
-EU Method B.17 (Mutagenicity - In Vitro Mammalian Cell Gene Mutation Test)
-OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Result: negative.
Literature information: REACH Dossier
Subacute oral toxicity:
Method: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Species: Rat
Exposure duration: 28 d.
Results:
NOAEL = 40 mg/kg (Toxicity)
NOAEL = 100 mg/kg (Developmental toxicity/teratogenicity)
Literature information: REACH Dossier

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.

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts (CAS-No.: 97862-59-4):

Subchronic oral toxicity:
Method: OECD Guideline 408
Species: Rat
Exposure time: 90d
Exposure route: oral
Result: NOEL > = 300 mg/Kg
Literature information: REACH Dossier

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides:
Subchronic oral toxicity :
Method: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Species: Sprague-Dawley Rat
Exposure duration: 90 d.
Results: NOAEL = 88 mg/kg.
Literature information: REACH Dossier

Aspiration hazard

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

Specific effects in experiment on an animal

No data available.

11.2. Information on other hazards**Endocrine disrupting properties**

This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

No data available.

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SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
97862-59-4	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts					
	Acute fish toxicity	LC50 mg/l	1,11	96 h	Pimephales promelas	REACH Dossier
	Acute algae toxicity	ErC50	1,5 mg/l	72 h	Desmodesmus subspicatus	REACH Dossier
	Acute crustacea toxicity	EC50	6,5 mg/l	48 h	Daphnia magna	REACH Dossier
	Fish toxicity	NOEC mg/l	0,135	100 d	Oncorhynchus mykiss	REACH Dossier
	Crustacea toxicity	NOEC mg/l	0,32	21 d	Daphnia magna	REACH Dossier
68439-46-3	Alcohols C9-11, ethoxylated					
	Acute fish toxicity	LC50 mg/l	5 - 7	96 h	Oncorhynchus mykiss	REACH Dossier
	Acute algae toxicity	ErC50	1,5 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Dossier
	Acute crustacea toxicity	EC50	2,5 mg/l	48 h	Daphnia magna	REACH Dossier
	Crustacea toxicity	NOEC mg/l	2,11	21 d	Daphnia maga	REACH Dossier QSAR
141-43-5	2-aminoethanol, ethanolamine					
	Acute fish toxicity	LC50	349 mg/l	96 h	Cyprinus carpio	REACH Dossier other: Directive 92/69/EEC, C.1.
	Acute algae toxicity	ErC50	2,8 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Dossier OECD 201
	Acute crustacea toxicity	EC50 mg/l	27,04	48 h	Daphnia magna	REACH Dossier OECD 202
	Fish toxicity	NOEC mg/l	1,24	41 d	Oryzias latipes	REACH Dossier OECD 210
	Crustacea toxicity	NOEC mg/l	0,85	21 d	Daphnia magna	REACH Dossier OECD 202
308062-28-4	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides					
	Acute fish toxicity	LC50	2,67- 3,46 mg/l	96 h	Pimephales promelas	REACH Dossier
	Acute crustacea toxicity	EC50 mg/l	10,5	48 h	Daphnia magna	REACH Dossier
	Algae toxicity	NOEC mg/l	0,067	28 d		REACH Dossier
110-43-0	heptan-2-one, methyl amyl ketone					
	Acute fish toxicity	LC50	131 mg/l	96 h	Pimephales promelas	REACH Dossier EPA OPP 72-1
	Acute algae toxicity	ErC50 mg/l	75,5	72 h	Pseudokirchneriella subcapitata	REACH Dossier OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 90,1	48 h	Daphnia magna	REACH Dossier OECD Guideline 202

12.2. Persistence and degradability

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

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CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
97862-59-4	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	92%	28	REACH Dossier
	Readily biodegradable (according to OECD criteria).				
68439-46-3	Alcohols C9-11, ethoxylated	ISO 14593	72%	28	REACH Dossier
	Readily biodegradable (according to OECD criteria).				
141-43-5	2-aminoethanol, ethanolamine	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	>90%	21	REACH Dossier
	Readily biodegradable (according to OECD criteria).				
308062-28-4	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	>70	28	REACH Dossier
	Readily biodegradable (according to OECD criteria).				
110-43-0	heptan-2-one, methyl amyl ketone	OECD Guideline 310	69%	28	REACH Dossier
	Easily biodegradable (concerning to the criteria of the OECD)				

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
97862-59-4	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts	4,232
68439-46-3	Alcohols C9-11, ethoxylated	3.74
141-43-5	2-aminoethanol, ethanolamine	-2,3
308062-28-4	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	0,93
110-43-0	heptan-2-one, methyl amyl ketone	2,26

BCF

CAS No	Chemical name	BCF	Species	Source
97862-59-4	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts	3	Fish	Reach Dossier
68439-46-3	Alcohols C9-11, ethoxylated	12.7	Pimephales promelas	REACH Dossier
141-43-5	2-aminoethanol, ethanolamine	2,5		QSAR

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

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

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

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.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.7. Other adverse effects

No data available.

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Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

List of Wastes Code - used product

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

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

Inland waterways transport (ADN)

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

Marine transport (IMDG)

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

Air transport (ICAO-TI/IATA-DGR)

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

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

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14.6. Special precautions for user

refer to chapter 6 - 8

14.7. Maritime transport in bulk according to IMO instruments

not relevant

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 75

2010/75/EU (VOC): not determined

2004/42/EC (VOC): not determined

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

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

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

Regulation (EC) No. 648/2004 (Detergents regulation)

REACH 1907/2006 Appendix XVII, No (mixture): 3

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

For the following substances of this mixture a chemical safety assessment has been carried out:

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts

2-aminoethanol, ethanolamine

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

heptan-2-one, methyl amyl ketone

SECTION 16: Other information**Changes**

Rev.: 1,0; Initial release: 28.04.2017

Rev.: 2,0; Revision: 18.11.2019 (Changes in chapter: 2, 3, 5, 8, 10, 11, 13, 15, 16)

Rev.: 3,0; 14.12.2021, Changes in chapter: 2 - 16.

Rev.: 4,0; 06.09.2023; Changes in chapter: 2 - 16.

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Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

AGW: Arbeitsplatzgrenzwert

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of substances and mixtures

DNEL: Derived No Effect Level

d: day(s)

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

ECHA: European Chemicals Agency

EWC: European Waste Catalogue

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

h: hour

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect concentration

NLP: No-Longer Polymers

N/A: not applicable

OECD: Organisation for Economic Co-operation and Development

PNEC: predicted no effect concentration

PBT: Persistent bioaccumulative toxic

RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

REACH: Registration, Evaluation, Authorisation of Chemicals

SVHC: substance of very high concern

TRGS: Technische Regeln für Gefahrstoffe

UN: United Nations

VOC: Volatile Organic Compounds

WGK: Water Hazard Class (Germany)

Flam. Liq: Flammable liquid

Acute Tox: Acute toxicity

Skin Corr: Skin corrosion

Skin Irrit: Skin irritation

Eye Dam: Eye damage

Eye Irrit: Eye irritation

Skin Sens: Skin sensitisation

STOT SE: Specific target organ toxicity - single exposure

Aquatic Acute: Acute aquatic hazard

Aquatic Chronic: Chronic aquatic hazard

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

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H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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