SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830

WHEEL CLEANER

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

1.1. Product identifier

Product name : WHEEL CLEANER
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Detergent according to Regulation (EC) No 648/2004

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
🖷 +32 14 22 02 66
info@novatio.be
*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
🖷 +32 14 85 97 38
info@tec7.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Skin Corr.	category 1	H314: Causes severe skin burns and eye damage.
Eye Dam.	category 1	H318: Causes serious eye damage.

2.2. Label elements

Contains: Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.; phosphoric acid; sulphuric acid.

Signal word Danger

H-statements

H314 Causes severe skin burns and eye damage.

P-statements

P280 Wear protective gloves, protective clothing and eye protection/face protection.
P260 Do not breathe vapours/mist.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.

2.3. Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. 01-2119490234-40	85536-14-7 287-494-3	C≤9%	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412	(1)(10)	Constituent
phosphoric acid 01-2119485924-24	7664-38-2 231-633-2	C≤5%	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318	(1)(2)(6)(8)(10)	Constituent
isotridecanol, ethoxylated	69011-36-5	C≤4%	Acute Tox. 4; H302 Eye Dam. 1; H318	(1)(10)	Constituent
sulphuric acid 01-2119458838-20	7664-93-9 231-639-5	C≤3%	Skin Corr. 1A; H314 Eye Dam. 1; H318	(1)(2)(8)(10)	Constituent
sodium etasulfate 01-2119971586-23	126-92-1 204-812-8	C≤2%	Eye Dam. 1; H318 Skin Irrit. 2; H315	(8)	Constituent

(1) For H-statements in full: see heading 16
(2) Substance with a Community workplace exposure limit
(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data
(8) Specific concentration limits, see heading 16
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Wash immediately with lots of water (15 minutes)/shower. Remove clothing while washing. Do not apply (chemical) neutralizing agents without medical advice. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.

After eye contact:

Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice. Take victim to an ophthalmologist.

After ingestion:

Rinse mouth with water. Do not induce vomiting. Do not apply (chemical) neutralizing agents without medical advice. Immediately consult a doctor/medical service.

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

4.2.1 Acute symptoms

After inhalation:

EXPOSURE TO HIGH CONCENTRATIONS: Corrosion of the upper respiratory tract. Respiratory difficulties. Coughing. Risk of lung oedema. Possible inflammation of the respiratory tract.

After skin contact:

Caustic burns/corrosion of the skin.

After eye contact:

Corrosion of the eye tissue.

After ingestion:

Burns to the gastric/intestinal mucosa. Possible esophageal perforation.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher.

Major fire: Class B foam (alcohol-resistant), Water spray if puddle cannot expand.

5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.

Major fire: Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

On burning: release of toxic and corrosive gases/vapours e.g. phosphorus oxides, sulphur oxides, carbon monoxide - carbon dioxide.

5.3. Advice for firefighters

5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it. Heat exposure: dilute toxic gas/vapour with water spray.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Face shield. Corrosion-proof suit. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Face shield. Corrosion-proof suit.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Contain released product. Dam up the liquid spill. Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. Observe strict hygiene. Remove contaminated clothing immediately. Do not discharge the waste into the drain. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Protect against frost. Keep container in a well-ventilated place. Keep out of direct sunlight. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources, oxidizing agents, (strong) bases.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

EU

Orthophosphoric acid	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1 mg/m³
	Short time value (Indicative occupational exposure limit value)	2 mg/m³
Sulphuric acid (mist)	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	0.05 mg/m³

Belgium

Acide phosphorique	Time-weighted average exposure limit 8 h	1 mg/m³
	Short time value	2 mg/m³
Acide sulfurique (brume)	Time-weighted average exposure limit 8 h	0.2 mg/m³

The Netherlands

Fosforzuur	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.25 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1 mg/m³
	Short time value (Public occupational exposure limit value)	0.49 ppm
	Short time value (Public occupational exposure limit value)	2 mg/m³
Zwavelzuur (nevel), gedefinieerd als de thoracale fractie	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.012 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.05 mg/m³

France

Acide phosphorique	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	0.2 ppm
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	1 mg/m³
	Short time value (VRI: Valeur réglementaire indicative)	0.5 ppm
	Short time value (VRI: Valeur réglementaire indicative)	2 mg/m³
Acide sulfurique, fraction thoracique	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	0.05 mg/m³
	Short time value (VL: Valeur non réglementaire indicative)	3 mg/m³

Germany

Orthophosphorsäure	Time-weighted average exposure limit 8 h (TRGS 900)	2 mg/m³
Schwefelsäure	Time-weighted average exposure limit 8 h (TRGS 900)	0.1 mg/m³

UK

Orthophosphoric acid	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	2 mg/m³
Sulphuric acid (mist)	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	0.05 mg/m³

USA (TLV-ACGIH)

Phosphoric acid	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1 mg/m³
	Short time value (TLV - Adopted Value)	3 mg/m³
Sulfuric acid	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	0.2 mg/m³ (T)

(T): Thoracic fraction

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Product name	Test	Number
NON-VOLATILE ACIDS (Phosphoric Acid)	NIOSH	7908
NON-VOLATILE ACIDS (Sulfuric Acid)	NIOSH	7908
o-Phosphoric Acid	NIOSH	7903
Phosphoric Acid	OSHA	ID 111
Phosphoric Acid	OSHA	ID 165SG
Sulfuric Acid (Acids, inorganic)	NIOSH	7903
Sulfuric Acid mist	ASTM	D 4856-88
Sulfuric Acid	NIOSH	7903
Sulfuric Acid	OSHA	ID 113
Sulfuric Acid	OSHA	ID 165SG

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	6 mg/m³	
	Long-term systemic effects dermal	85 mg/kg bw/day	

phosphoric acid

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	10.7 mg/m³	
	Long-term local effects inhalation	1 mg/m³	Test data of the pure substance
	Acute systemic effects inhalation	2 mg/m³	Test data of the pure substance

sulphuric acid

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term local effects inhalation	0.05 mg/m³	
	Acute local effects inhalation	0.1 mg/m³	

sodium etasulfate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	285 mg/m³	
	Long-term systemic effects dermal	4060 mg/kg bw/day	

DNEL/DMEL - General population

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1.5 mg/m³	
	Long-term systemic effects dermal	42.5 mg/kg bw/day	
	Long-term systemic effects oral	0.425 mg/kg bw/day	

phosphoric acid

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	4.57 mg/m³	
	Long-term local effects inhalation	0.36 mg/m³	
	Long-term systemic effects oral	0.1 mg/kg bw/day	

sodium etasulfate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	85 mg/m³	
	Long-term systemic effects dermal	2440 mg/kg bw/day	
	Long-term systemic effects oral	24 mg/kg bw/day	

PNEC

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

Compartments	Value	Remark
Fresh water	0.268 mg/l	
Marine water	0.027 mg/l	
Fresh water (intermittent releases)	0.017 mg/l	
STP	3.43 mg/l	
Fresh water sediment	8.1 mg/kg sediment dw	
Marine water sediment	6.8 mg/kg sediment dw	
Soil	35 mg/kg soil dw	

sulphuric acid

Compartments	Value	Remark
Fresh water	0.0025 mg/l	
Marine water	0.00025 mg/l	
STP	8.8 mg/l	
Fresh water sediment	0.002 mg/kg sediment dw	
Marine water sediment	0.002 mg/kg sediment dw	

sodium etasulfate

Compartments	Value	Remark
Fresh water	0.136 mg/l	
Marine water	0.014 mg/l	
Fresh water (intermittent releases)	4.83 mg/l	
STP	1.35 mg/l	
Fresh water sediment	1.5 mg/kg sediment dw	
Marine water sediment	0.15 mg/kg sediment dw	
Soil	0.22 mg/kg soil dw	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe strict hygiene. Do not eat, drink or smoke during work.

a) Respiratory protection:

Full face mask with filter type B at conc. in air > exposure limit.

b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Remark	Protection index
viton	> 480 minutes	0.7 mm	Class 6

c) Eye protection:

Face shield.

d) Skin protection:

Corrosion-proof clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Liquid
Odour	Characteristic odour
Odour threshold	No data available in the literature
Colour	No data available on colour
Particle size	Not applicable (liquid)
Explosion limits	No data available in the literature
Flammability	Not classified as flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	1 mPa.s ; 20 °C
Kinematic viscosity	1 mm²/s ; 20 °C
Melting point	0 °C
Boiling point	100 °C - 290 °C
Evaporation rate	No data available in the literature
Relative vapour density	No data available in the literature
Vapour pressure	23 hPa ; 20 °C
Solubility	Water ; complete
Relative density	1.1
Decomposition temperature	No data available in the literature
Auto-ignition temperature	No data available in the literature
Flash point	No data available in the literature
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	0.7

9.2. Other information

Absolute density	1071 kg/m³

SECTION 10: Stability and reactivity

10.1. Reactivity

Heating increases the fire hazard. Acid reaction.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat.

10.5. Incompatible materials

Oxidizing agents, (strong) bases.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours e.g. phosphorus oxides, sulphur oxides, carbon monoxide - carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

WHEEL CLEANER

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	1470 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male / female)	Experimental value	
Inhalation						Data waiving	

phosphoric acid

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		1530 mg/kg bw - 3400 mg/kg bw		Rat (female)	Experimental value	Inconsistent data
Dermal	LD50		2740 mg/kg bw		Rabbit	Experimental value	
Inhalation						Data waiving	

isotridecanol, ethoxylated

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral			category 4			Literature study	

sulphuric acid

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	2140 mg/kg bw		Rat (male / female)	Experimental value	
Dermal						Data waiving	
Inhalation (aerosol)	LC50	Equivalent to OECD 403	0.375 mg/l air	4 h	Rat (male / female)	Experimental value	
						Data waiving	Not classified

sodium etasulfate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	2840 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male / female)	Read-across	
Inhalation						Data waiving	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

WHEEL CLEANER

No (test)data on the mixture available

Classification is based on the pH

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	OECD 405		1; 24; 48; 72; 168 hours	Rabbit	Experimental value	Single treatment without rinsing
Skin	Corrosive	OECD 404	4 h	1; 24; 48; 72 hours	Rabbit	Experimental value	

phosphoric acid

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Corrosive	Other			Rabbit	QSAR	75 % aqueous solution
Skin	Corrosive	16 CFR 1500.41	24 h	24; 72 hours	Rabbit	Experimental value	80 % aqueous solution

isotridecanol, ethoxylated

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage; category 1					Literature study	

sulphuric acid

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage; category 1					Annex VI	
Skin	Highly corrosive; category 1A					Annex VI	

sodium etasulfate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	Equivalent to OECD 405		24; 48; 72 hours	Rat	Experimental value	Single treatment
Eye	Serious eye damage; category 1					Literature study	
Skin	Irritating	OECD 404	4 h	24; 72 hours	Rabbit	Read-across	

Conclusion

Causes severe skin burns and eye damage.
Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

WHEEL CLEANER

No (test)data on the mixture available

Judgement is based on the relevant ingredients
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Guinea pig maximisation test		24; 48 hours	Guinea pig (male / female)	Experimental value	

phosphoric acid

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin						Data waiving	

sulphuric acid

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin						Data waiving	
Inhalation						Data waiving	

sodium etasulfate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 429			Mouse (female)	Read-across	

Conclusion

Not classified as sensitizing for skin
Not classified as sensitizing for inhalation

Specific target organ toxicity

WHEEL CLEANER

No (test)data on the mixture available

Judgement is based on the relevant ingredients
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (diet)	NOAEL	Subchronic toxicity test	40 mg/kg bw/day		No effect	6 month(s)	Rat (male / female)	Experimental value

phosphoric acid

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	OECD 422	250 mg/kg		No effect	54 day(s)	Rat (male / female)	Experimental value
Dermal								Data waiving
Inhalation (aerosol)	Dose level		10.6 mg/m³ air	Liver	Enlargement/ affection of the liver		Rat	Experimental value

sulphuric acid

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral								Data waiving
Dermal								Data waiving
Inhalation (aerosol)	LOAEC	OECD 412	0.3 mg/m³ air	Respiratory tract	Histopathology	4 weeks (6h / day, 5 days / week)	Rat (female)	Experimental value
Inhalation		Human observation	> 1 mg/m³ air	Lungs	Lung tissue affection/degeneration		Human	Weight of evidence

sodium etasulfate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (diet)	NOAEL	Equivalent to OECD 408	488 mg/kg bw/day		No effect	13 weeks (daily)	Rat (male / female)	Read-across
Oral (diet)	LOAEL	Equivalent to OECD 408	1016 mg/kg bw/day		Systemic effects	13 weeks (daily)	Rat (male / female)	Read-across
Dermal	NOAEL	Equivalent to OECD 411	10 %		No effect	13 weeks (2 times / week)	Mouse (male / female)	Read-across
Dermal	LOAEL	Equivalent to OECD 411	12.5 %	Skin	Caustic burns/corrosion of the skin	13 weeks (2 times / week)	Mouse (male / female)	Read-across

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

WHEEL CLEANER

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

Result	Method	Test substrate	Effect	Value determination	Remark
Negative	Equivalent to OECD 476	Chinese hamster ovary (CHO)		Read-across	
Negative	EU Method B.13/14	Bacteria (S.typhimurium)		Experimental value	

phosphoric acid

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)		Experimental value	Test data of the pure substance

sulphuric acid

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Ames test	Bacteria (S.typhimurium)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Read-across	

sodium etasulfate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)		Experimental value	

Mutagenicity (in vivo)

WHEEL CLEANER

No (test)data on the mixture available

Judgement is based on the relevant ingredients

phosphoric acid

Result	Method	Exposure time	Test substrate	Organ	Value determination
					Data waiving

sulphuric acid

Result	Method	Exposure time	Test substrate	Organ	Value determination
					Data waiving

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

WHEEL CLEANER

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Unknown								Data waiving

sulphuric acid

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Oral	Dose level	Carcinogenic toxicity study	200 µl/week	> 1 year(s)	Mouse (male / female)	Tumours of the gastrointestinal tract	Stomach	Weight of evidence
Oral	Dose level	Carcinogenic toxicity study	500 µl/week	> 1.5 year(s)	Rat (male / female)	Tumours of the gastrointestinal tract	Stomach	Weight of evidence

sodium etasulfate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Oral	NOEL	Equivalent to OECD 453	> 1125 mg/kg bw/day	2 year(s)	Rat (male / female)	No carcinogenic effect		Read-across

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

WHEEL CLEANER

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Developmental toxicity study	300 mg/kg	10 days (gestation, daily)	Rat	No effect		Read-across
Maternal toxicity	NOAEL	Developmental toxicity study	300 mg/kg	10 days (gestation, daily)	Rat	No effect		Read-across
Effects on fertility	NOAEL		350 mg/kg bw/day	2 year(s)	Rat (male / female)	No effect		Read-across

phosphoric acid

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	≥ 410 mg/kg bw/day	10 days (gestation, daily)	Rat (female)	No effect		Read-across
Maternal toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	≥ 410 mg/kg bw/day	10 days (gestation, daily)	Rat (female)	No effect		Read-across
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 422	≥ 500 mg/kg bw/day	≥ 42 days (1x / day)	Rat (male / female)	No effect		Experimental value

sulphuric acid

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Inhalation (aerosol))	NOAEC	Equivalent to OECD 414	19.3 mg/m³ air	10 days (gestation, daily)	Mouse (female)	No effect		Experimental value
	NOAEC	Equivalent to OECD 414	19.3 mg/m³ air	13 days (gestation, daily)	Rabbit (female)	No effect		Experimental value
Maternal toxicity (Inhalation (aerosol))	LOAEC	Equivalent to OECD 414	19.3 mg/m³ air	10 days (gestation, daily)	Mouse (female)	Reduced food consumption	General	Experimental value
	NOAEC	Equivalent to OECD 414	5.7 mg/m³ air	10 days (gestation, daily)	Mouse (female)	No effect		Experimental value
	LOAEC	Equivalent to OECD 414	19.3 mg/m³ air	13 days (gestation, daily)	Rabbit (female)	Local effects	Respiratory tract	Experimental value
	NOAEC	Equivalent to OECD 414	5.7 mg/m³ air	13 days (gestation, daily)	Rabbit (female)	No effect		Experimental value
Effects on fertility								Data waiving

sodium etasulfate

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOEL	Equivalent to OECD 414	250 mg/kg bw/day	10 days (gestation, daily)	Rat	No effect		Read-across
Maternal toxicity	NOEL	Equivalent to OECD 414	250 mg/kg bw/day	10 days (gestation, daily)	Rat	No effect		Read-across
Effects on fertility								Data waiving

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

WHEEL CLEANER

No (test)data on the mixture available

Chronic effects from short and long-term exposure

WHEEL CLEANER

No effects known.

SECTION 12: Ecological information

12.1. Toxicity

WHEEL CLEANER

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	US EPA	1.67 mg/l	96 h	Lepomis macrochirus	Static system	Fresh water	Experimental value
Acute toxicity crustacea	EC50	OECD 202	2.9 mg/l	48 h	Daphnia magna	Static system	Fresh water	Read-across; GLP
Toxicity algae and other aquatic plants	EC10	Equivalent to OECD 201	13.1 mg/l	96 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Read-across; Growth rate
	ErC50	Equivalent to OECD 201	235 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Read-across; Growth rate
Long-term toxicity fish	NOEC	Equivalent to OECD 210	0.23 mg/l	72 day(s)	Oncorhynchus mykiss	Flow-through system	Fresh water	Read-across
Long-term toxicity aquatic crustacea	NOEC	Equivalent to OECD 211	1.18 mg/l	21 day(s)	Daphnia magna	Flow-through system	Fresh water	Read-across

phosphoric acid

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	TLm	Equivalent to OECD 203	138 ppm	96 h	Gambusia affinis	Static system	Fresh water	Experimental value; Pure substance
Acute toxicity crustacea	EC50	OECD 202	> 100 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Pure substance
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 100 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Pure substance
	NOEC	OECD 201	100 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Pure substance
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea								Data waiving

sulphuric acid

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		16 mg/l - 28 mg/l	96 h	Lepomis macrochirus	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	OECD 202	> 100 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 100 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; GLP

sodium etasulfate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	> 100 mg/l	96 h	Danio rerio	Semi-static system	Fresh water	Read-across; GLP
Acute toxicity crustacea	EC50	EU Method C.2	483 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	EU Method C.3	> 511 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; GLP
	EC10	EU Method C.3	199 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; GLP
Long-term toxicity fish	NOEC		≥ 1.357 mg/l	42 day(s)	Pimephales promelas	Flow-through system	Fresh water	Read-across
Long-term toxicity aquatic crustacea	NOEC	OECD 211	1.4 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Read-across; GLP

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

Biodegradation water

Method	Value	Duration	Value determination
Equivalent or similar to OECD 301A	94 %; GLP	28 day(s)	Experimental value

Biodegradation soil

Method	Value	Duration	Value determination
	50 %	7 day(s) - 22 day(s)	Read-across

isotridecanol, ethoxylated

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	82 %	28 day(s)	Experimental value

sodium etasulfate

Biodegradation water

Method	Value	Duration	Value determination
Equivalent or similar to OECD 301B	89.3 %; GLP	28 day(s)	Experimental value

Conclusion

The surfactant(s) is/are biodegradable according to Regulation (EC) No 648/2004

12.3. Bioaccumulative potential

WHEEL CLEANER

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF		159; Fresh weight	11.5 day(s)	Palaemonetes sp.	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 123		2.2	23 °C	Experimental value

phosphoric acid

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

isotridecanol, ethoxylated

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		232.5 l/kg	54 h - 72 h	Pimephales promelas	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		6.4	22 °C	Weight of evidence approach

sulphuric acid

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable			

sodium etasulfate

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 123		-0.248	25 °C	Experimental value

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

isotridecanol, ethoxylated

(log) Koc

Parameter	Method	Value	Value determination
log Koc		2.376 - 2.645	QSAR

sodium etasulfate

(log) Koc

Parameter	Method	Value	Value determination
log Koc		1.88 - 2	Read-across

Conclusion

Contains component(s) with potential for mobility in the soil
Contains component(s) that adsorb(s) into the soil

12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

WHEEL CLEANER

Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

isotridecanol, ethoxylated

Groundwater

Groundwater pollutant

sulphuric acid

Groundwater

Groundwater pollutant

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.
Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).
20 01 29* (separately collected fractions (except 15 01): detergents containing hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).
15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1. UN number

UN number	1760

14.2. UN proper shipping name

Proper shipping name	Corrosive liquid, n.o.s. (Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.)

14.3. Transport hazard class(es)

Hazard identification number	80
Class	8
Classification code	C9

14.4. Packing group

Packing group	III
Labels	8

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	274
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Specific mention	Classified corrosive on grounds of extreme pH value

Rail (RID)

14.1. UN number

UN number	1760

14.2. UN proper shipping name

Proper shipping name	Corrosive liquid, n.o.s. (Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.)

14.3. Transport hazard class(es)

Hazard identification number	80
Class	8
Classification code	C9

14.4. Packing group

Packing group	III
Labels	8

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	274
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Specific mention	Classified corrosive on grounds of extreme pH value

Inland waterways (ADN)

14.1. UN number

UN number	1760

14.2. UN proper shipping name

Proper shipping name	Corrosive liquid, n.o.s. (Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.)

14.3. Transport hazard class(es)

Class	8
Classification code	C9

14.4. Packing group

Packing group	III
Labels	8

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	274
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Specific mention	Classified corrosive on grounds of extreme pH value

Sea (IMDG/IMSBC)

14.1. UN number

UN number	1760

14.2. UN proper shipping name

Proper shipping name	corrosive liquid, n.o.s. (Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.)

14.3. Transport hazard class(es)

Class	8

14.4. Packing group

Packing group	III
Labels	8

14.5. Environmental hazards

Marine pollutant	-
Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	223
Special provisions	274
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Specific mention	Classified corrosive on grounds of extreme pH value

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Annex II of MARPOL 73/78	Not applicable, based on available data

Air (ICAO-TI/IATA-DGR)

14.1. UN number

UN number	1760

14.2. UN proper shipping name

Proper shipping name	Corrosive liquid, n.o.s. (Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.)

14.3. Transport hazard class(es)

Class	8

14.4. Packing group

Packing group	III
Labels	8

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	A3
Special provisions	A803
Specific mention	Classified corrosive on grounds of extreme pH value

Passenger and cargo transport

Limited quantities: maximum net quantity per packaging	1 L

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
0.0 g/l	

Ingredients according to Regulation (EC) No 648/2004 and amendments

5-15% anionic surfactants, <5% non-ionic surfactants

European drinking water standards (Directive 98/83/EC)

sulphuric acid

Parameter	Parametric value	Note	Reference
Sulphate	250 mg/l		Listed in Annex I, Part C, of Directive 98/83/EC on the quality of water intended for human consumption.

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. · phosphoric acid · isotridecanol, ethoxylated · sulphuric acid	Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: “Keep lamps filled with this liquid out of the reach of children”; and, by 1 December 2010, “Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life- threatening lung damage”; b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: “Just a sip of grill lighter may lead to life threatening lung damage”; c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010. 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled H304, intended for supply to the general public. 7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'

National legislation Belgium

WHEEL CLEANER

No data available

sulphuric acid

Additional classification	Acide sulfurique (brume); C; La mention “C” signifie que l’agent en question relève du champ d’application de l’arrêté royal du 2 décembre 1993 concernant la protection des travailleurs contre les risques liés à l’exposition à des agents cancérigènes et mutagènes et reprotoxiques au travail.

National legislation The Netherlands

WHEEL CLEANER

Waterbezwaarlijkheid	B (3); Algemene Beoordelingsmethodiek (ABM)

sulphuric acid

SZW - Lijst van kankerverwekkende stoffen	zwavelzuurnevels; Listed in SZW-list of carcinogenic substances

National legislation France

WHEEL CLEANER

No data available

National legislation Germany

WHEEL CLEANER

WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

TA-Luft	5.2.5/I

phosphoric acid

TRGS900 - Risiko der Fruchtschädigung	Orthophosphorsäure; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

isotridecanol, ethoxylated

TA-Luft	5.2.5/I

sulphuric acid

TRGS900 - Risiko der Fruchtschädigung	Schwefelsäure; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

sodium etasulfate

TA-Luft	5.2.1

National legislation United Kingdom

WHEEL CLEANER

No data available

Other relevant data

WHEEL CLEANER

No data available

sulphuric acid

IARC - classification	1; Strong-inorganic-acid mists containing sulfuric acid
TLV - Carcinogen	Sulfuric acid; A2

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

SECTION 16: Other information

Full text of any H-statements referred to under heading 3:

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

Specific concentration limits CLP

phosphoric acid ... %	C ≥ 25 %	Skin Corr. 1B; H314	CLP Annex VI (ATP 0)
	10 % ≤ C < 25 %	Skin Irrit. 2; H315	CLP Annex VI (ATP 0)
	10 % ≤ C < 25 %	Eye Irrit. 2; H319	CLP Annex VI (ATP 0)
sulphuric acid ... %	C ≥ 15 %	Skin Corr. 1A; H314	CLP Annex VI (ATP 0)
	5 % ≤ C < 15 %	Skin Irrit. 2; H315	CLP Annex VI (ATP 0)
	5 % ≤ C < 15 %	Eye Irrit. 2; H319	CLP Annex VI (ATP 0)
sodium etasulfate	C ≥ 20 %	Eye Dam. 1; H318	ECHA
	10 % ≤ C < 20 %	Skin Irrit. 2; H315	ECHA

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.