



Power Cleaner Limescale

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue:9/4/2018 Revision date: :

Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : Power Cleaner Limescale
Product code : 003200147
Article number : 1813
EAN : 8712038001813
Type of product : Detergent
Vaporizer : Bottle fitted with a spray attachment
Product group : Blend

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Sanitary Cleaner.
Function or use category : Cleaning/washing agents and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Blue Wonder
Aerdenhoutsduinweg 1
NL-2111AN AERDENHOUT - Netherlands
T +31 (0)251-315683 - F +31 (0)251-311197
info@bluewonder.nl - www.bluewonder.nl

1.4. Emergency telephone number

Emergency number : +31 (0)251-315683
(During office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category 2 H319

Full text of H statements : see section 16

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning
Hazard statements (CLP) : H319 - Causes serious eye irritation.
Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.
P280 - Wear eye 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.

2.3. Other hazards

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Weight(%)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-hydroxypropane-1,2,3-tricarboxylic acid	(CAS-No.) 77-92-9 (EC-No.) 201-069-1 (REACH-no) 01-2119457026-42	5 - < 10	Eye Irrit. 2, H319
Lactic Acid	(CAS-No.) 79-33-4 (EC-No.) 201-196-2 (REACH-no) 01-2119474164-39	1 - < 5	Skin Irrit. 2, H315 Eye Dam. 1, H318
Cocamidopropyl Betaine	(CAS-No.) 97862-59-4 (EC-No.) 931-296-8 (REACH-no) 01-2119488533-30	1 - < 5	Eye Irrit. 2, H319
Dipropylene glycol monomethyl ether	(CAS-No.) 34590-94-8 (EC-No.) 252-104-2 (REACH-no) 01-2119450011-60	1 - < 5	Not classified

Full text of (EU)H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In case of any doubt or when irritation occurs or persists seek medical advice. If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	: If experiencing respiratory symptoms: Assure fresh air breathing.
First-aid measures after skin contact	: Wash skin with mild soap and water.
First-aid measures after eye contact	: In case of eye contact, immediately rinse with clean water for 10-15 minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Drink some water or milk (1/4 litre). Eat something fat (like coffee cream, butter, mayonnaise, etc.). Seek medical advice immediately and show this container or label.

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

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: None under normal use. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after skin contact	: Contact during a long period may cause light irritation. Redness.
Symptoms/effects after eye contact	: Causes serious eye irritation. Redness.
Symptoms/effects after ingestion	: May cause irritation of the linings of the mouth, throat, and gastrointestinal tract.

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

In case of any doubt or when irritation occurs or persists seek medical advice.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: All known extinguishants can be used.
Unsuitable extinguishing media	: None to our knowledge.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: The product itself does not maintain combustion.
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5.3. Advice for firefighters

Protection during firefighting	: Use fire fighting measures that suit the environment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Material spilled on hard surface can present a serious slipping/falling hazard.
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6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

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6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Pick up as much as possible of the spilled product. Store picked-up material in a drum. Wash non-recoverable remainder with large amounts of water.

6.4. Reference to other sections

Reference to other sections : Personal precautions: Refer to section 8.
Handling and storage: Refer to section 7.
Waste disposal recommendations: Refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Normal precautions for the use of chemicals and cleaners should be taken care of. Products should only be used in the packaging form provided or recommended, including spray nozzle, in order to prevent respirable product particle formation.
Spray on a cloth and then wipe the surface with the damp cloth.
Direct spraying is only recommended for spot removal.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Protect from freezing.

7.3. Specific end use(s)

Specific end use(s) : When the product is used as directed in Section 1.2 under normal conditions, no specific measures are required. The necessary measures can be found in Section 7.1 and 7.2. Avoid breathing dust, mist or spray.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information : The product itself is not tested on occupational exposure limits, but if the product contains substances with occupational exposure limits these are listed here. No listing means that the product does not contain any substances with occupational exposure limits.

Dipropylene glycol monomethyl ether (34590-94-8)		
EU	Local name	(2-Methoxymethylethoxy)-propanol
EU	IOELV TWA (mg/m ³)	308 mg/m ³
EU	IOELV TWA (ppm)	50 ppm
EU	Notes	Skin

2-hydroxypropane-1,2,3-tricarboxylic acid (77-92-9)	
PNEC (Water)	
PNEC aqua (freshwater)	0.44 mg/l
PNEC aqua (marine water)	0.044 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	34.6 mg/kg dwt
PNEC sediment (marine water)	3.46 mg/kg dwt
PNEC (Soil)	
PNEC soil	33.1 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	> 1000 mg/l

Lactic Acid (79-33-4)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	592 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, oral	35.4 mg/kg bodyweight
Acute - local effects, inhalation	296 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	1.3 mg/l
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

Cocamidopropyl Betaine (97862-59-4)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	12.5 mg/kg bodyweight/day

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Cocamidopropyl Betaine (97862-59-4)	
Long-term - systemic effects, inhalation	44 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	7.5 mg/kg bodyweight/day
Long-term - systemic effects, dermal	7.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.0135 mg/l
PNEC aqua (marine water)	0.00135 mg/l
PNEC (STP)	
PNEC sewage treatment plant	3000 mg/l

8.2. Exposure controls

Hand protection	: This product is not classified as dangerous for the skin and therefore no protection gloves are necessary when this product is used. In case of prolonged use or sensitive skin, where irritation is possible, it would be recommended to use gloves. When selecting protective gloves, always consider user specific circumstances like mechanical stress (cutting, drilling, etc.), contact time, temperature, use of other chemicals, etc. In consultation with the supplier of protective gloves a type can be chosen, which provides sufficient protection. Always check the instructions regarding breakthrough time and type & thickness of the material, as given by the glove supplier.
Eye protection	: When making normal use of the product not necessary. If there is a risk of liquid being splashed : Wear eye protection.
Respiratory protection	: When making normal use of the product not necessary.
Other information	: Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Acidic aqueous solution.
Colour	: Clear. Blue.
Odour	: Perfumed.
Odour threshold	: Not applicable
pH	: 2.05 - 2.15
Freezing point	: ± 0 °C
Boiling point	: ± 100 °C
Flash point	: > 100 °C
Relative evaporation rate (butylacetate=1)	: < 1
Flammability (solid, gas)	: The product itself does not maintain combustion.
Explosive limits	: Not established
Vapour pressure	: ± 23.4 hPa
Relative vapour density at 20 °C	: Not applicable
Relative density	: 1.025 - 1.035
Density	: 1.025 - 1.035 g/cm ³
Solubility	: Water: completely soluble
Partition coefficient n-octanol/water [log Pow]	: -0.89 (calculated value)
Auto-ignition temperature	: Not established
Decomposition temperature	: Not established
Viscosity, kinematic	: ± 10 mm ² /s
Viscosity, dynamic	: < 50 mPa.s
Explosive properties	: Not established.
Oxidising properties	: Not established.

9.2. Other information

VOC content	: < 30 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions. May react violently with alkalis: release of heat.

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

May react violently with alkalis: release of heat.

10.4. Conditions to avoid

None under normal conditions.

10.5. Incompatible materials

Bases, chlorine-based bleaching agents.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Power Cleaner Limescale	
Additional information	With the product as such no toxicological tests have been done. According to the criteria of 3.1.3 from (EC) 1272/2008 this product is not toxic. Components that are toxic are mentioned below.

2-hydroxypropane-1,2,3-tricarboxylic acid (77-92-9)	
LD50 oral rat	3000 mg/kg
LD50 oral	11700 mg/kg bodyweight
LD50 dermal rabbit	20000 mg/kg
LD50 dermal	> 2000 mg/kg bodyweight

Lactic Acid (79-33-4)	
LD50 oral	3730 mg/kg bodyweight
LD50 dermal	> 2000 mg/kg bodyweight
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 7940 mg/m ³

Cocamidopropyl Betaine (97862-59-4)	
LD50 oral	> 5000 mg/kg bodyweight

Skin corrosion/irritation : Not classified
pH: 2.05 - 2.15

Serious eye damage/irritation : Causes serious eye irritation.
pH: 2.05 - 2.15

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Power Cleaner Limescale	
Vaporizer	Bottle fitted with a spray attachment
Viscosity, kinematic	± 10 mm ² /s

SECTION 12: Ecological information

12.1. Toxicity

Power Cleaner Limescale	
Additional information	With the product as such no ecological tests have been done. According to the criteria of 4.1.3 from (EC) 1272/2008 this product is not dangerous for the environment. Components that are dangerous to the environment are mentioned below.

2-hydroxypropane-1,2,3-tricarboxylic acid (77-92-9)	
LC50 fish 1	1516 mg/l
EC50 other aquatic organisms 1	85 mg/l
EC50 other aquatic organisms 2	IC50 algae (72 h) mg/l

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Lactic Acid (79-33-4)	
LC50 fish 1	195 mg/l
EC50 other aquatic organisms 1	130 mg/l EC50 waterflea (48 h)
EC50 other aquatic organisms 2	> 2800 mg/l IC50 alga (72 h) mg/l
Cocamidopropyl Betaine (97862-59-4)	
LC50 fish 1	1.5 mg/l
EC50 other aquatic organisms 1	21.5 mg/l EC50 waterflea (48 h)
EC50 other aquatic organisms 2	30 mg/l IC50 alga (72 h) mg/l

12.2. Persistence and degradability

Power Cleaner Limescale	
Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
2-hydroxypropane-1,2,3-tricarboxylic acid (77-92-9)	
Persistence and degradability	Readily biodegradable.
Biodegradation	Readily biodegradable
Lactic Acid (79-33-4)	
Biodegradation	Readily biodegradable
Cocamidopropyl Betaine (97862-59-4)	
Biodegradation	>= 90 % Aerobic: (OECD 301B method), 28 days; Readily biodegradable. Anaerobic: (OECD 311 method), 60 days; Biodegradable

12.3. Bioaccumulative potential

Power Cleaner Limescale	
Partition coefficient n-octanol/water [log Pow]	-0.89 (calculated value)
2-hydroxypropane-1,2,3-tricarboxylic acid (77-92-9)	
Partition coefficient n-octanol/water [log Pow]	-1.64
Bioaccumulative potential	Bioaccumulation unlikely.
Lactic Acid (79-33-4)	
Partition coefficient n-octanol/water [log Pow]	-0.62
Cocamidopropyl Betaine (97862-59-4)	
Partition coefficient n-octanol/water [log Pow]	0.69
Dipropylene glycol monomethyl ether (34590-94-8)	
Partition coefficient n-octanol/water [log Pow]	1.01

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Power Cleaner Limescale	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
Component	
2-hydroxypropane-1,2,3-tricarboxylic acid (77-92-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Lactic Acid (79-33-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Cocamidopropyl Betaine (97862-59-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Pick up as much as possible of the spilled product. Store picked-up material in a drum. Dispose of in accordance with relevant local regulations. Wash non-recoverable remainder with large amounts of water.
Additional information	: Rinse the empty bottle. Then bottle can be disposed of with the normal domestic waste.

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Ecology - waste materials : Use appropriate container to avoid environmental contamination. Dispose of in accordance with relevant local regulations.
European List of Waste (LoW) code : 20 01 30 - detergents other than those mentioned in 20 01 29

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated for transport				
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not applicable; Not classified as dangerous in the meaning of transport regulations

- Transport by sea

Not applicable; Not classified as dangerous in the meaning of transport regulations

- Air transport

Not applicable; Not classified as dangerous in the meaning of transport regulations

- Inland waterway transport

Not applicable; Not classified as dangerous in the meaning of transport regulations

- Rail transport

Not applicable; Not classified as dangerous in the meaning of transport regulations

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IBC code : Not applicable. This product is not intended to be carried in bulk tankers.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : < 30 %

Detergent Regulation : Labelling of contents:

Component	%
non-ionic surfactants, amphoteric surfactants	<5%
BENZISOTHIAZOLINONE	
Perfumes	

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service
CLP	Classification Labelling Packaging; Regulation (EC) No 1272/2008
EC50	Median effective concentration
EC-No.	Official identification number of the substance within the European Union
IBC-code	International Bulk Chemical Code, the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IATA	International Air Transport Association.
ICAO	International Civil Aviation Organization.
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC50	Median lethal concentration
LD50	Median lethal dose
MAC	Maximum Allowable Concentration
PBT	Persistent Bioaccumulative Toxic.
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail.
SDS	Safety Data Sheet
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water hazard class (WGK)

Data sources

CLP	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
COSING	CosIng - http://ec.europa.eu/growth/tools-databases/cosing/
ECHA	ECHA (European Chemicals Agency) - https://echa.europa.eu/nl/home
GESTIS	GESTIS Substance Database - http://gestis-en.itrust.de/nxt/gateway.dll/gestis_en/000000.xml?f=templates\$fn=default.htm\$vid=gestiseng:sdbeng\$3.0
SER	The Social and Economic Council of the Netherlands (SER) - http://www.ser.nl
SDS	Safety Data Sheet Manufacturer/Supplier Raw material

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008:

Eye Irrit. 2	H319	Calculation method
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Full text of H- and EUH-statements:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

SDS EU (REACH Annex II)

The information given in this SDS relates to the product mentioned in section 1 and is provided on the assumption that the product will be used in the manner and for the purposes indicated by the manufacturer. The data given here is based on current knowledge and experience and if necessary regularly revised. It is the responsibility of the user to carry out the mentioned precautions and to ensure that this information is complete and sufficient for the use of this product. It is recommended to inform staff / people concerned about the information in this safety data sheet, if necessary in modified form. The data does not signify any warranty with regard to the products' properties.