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

1.1 Product identifier

Power Cleaner 300

Unique Formula Identifier : WY00-R0CK-Q00Q-3VHF

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

Relevant identified uses

PC 35 - Washing and cleaning products

Sectors of use [SU]

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Industrial uses

1.3 Details of the supplier of the safety data sheet

Supplier

Bio-Circle Surface Technology AG

Street : Aahusweg 16

Postal code/City : 6403 Küssnacht am Rigi

Telephone : 0041 41 878 1166

Telefax : 0041 41 878 1347

Information contact : accounting@bio-circle.ch

1.4 Emergency telephone number

+41 (0)442515151

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Met. Corr. 1 ; H290 - Corrosive to metals : Category 1 ; May be corrosive to metals.

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.

STOT SE 3 ; H335 - STOT-single exposure : Category 3 ; May cause respiratory irritation.

2.2 Label elements

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

Hazard pictograms

Exclamation mark (GHS07)

Signal word

Warning

Hazard statements

H290	May be corrosive to metals.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.

P271	Use only outdoors or in a well-ventilated area.
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P352	IF ON SKIN: Wash with plenty of water/....

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

HYDROGEN CHLORIDE ; REACH No. : 01-2119484862-27-XXXX ; EC No. : 231-595-7; CAS No. : 7647-01-0

Weight fraction :	≥ 15 - < 25 %
Classification 1272/2008 [CLP] :	Met. Corr. 1 ; H290 Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 STOT SE 3 ; H335 Substance with a common (EC) occupational exposure limit value.
Specific Conc. Limits :	Eye Dam. 1 ; H318: C ≥ 25 % • Skin Corr. 1B ; H314: C ≥ 25 % • Skin Corr. 1C ; H314: C ≥ 25 % • Eye Irrit. 2 ; H319: C ≥ 10 % • Skin Irrit. 2 ; H315: C ≥ 10 % • STOT SE 3 ; H335: C ≥ 10 %

Additional information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps.

Following inhalation

In case of respiratory tract irritation, consult a physician.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Rub greasy ointment into the skin.

After eye contact

P337+P313 - If eye irritation persists: Get medical advice/attention. In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Following ingestion

Rinse mouth thoroughly with water. Let 1 glass of water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation. Irritating to eyes, respiratory system and skin. Causes serious eye irritation. May cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Extinguishing powder Carbon dioxide (CO2) Sand Nitrogen Extinguishing blanket

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide , Carbon dioxide (CO2)

5.3 Advice for firefighters

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

5.4 Additional information

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings. Do not allow run-off from fire-fighting to enter drains or water courses. Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

P390 - Absorb spillage to prevent material damage.

6.1 Personal precautions, protective equipment and emergency procedures

Special danger of slipping by leaking/spilling product. Use personal protection equipment.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

Clear spills immediately. Wipe up with absorbent material (eg. cloth, fleece). Wash with plenty of water. Treat the recovered material as prescribed in the section on waste disposal.

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

Keep container tightly closed.

7.2 Conditions for safe storage, including any incompatibilities

P406 - Store in a corrosion resistant/... container with a resistant inner liner. Keep/Store only in original container.
Protect against : Frost .

Requirements for storage rooms and vessels

P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up.

7.3 Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

HYDROGEN CHLORIDE ; CAS No. : 7647-01-0

Limit value type (country of origin) :	KZGW (CH)
Limit value :	4 ppm / 6 mg/m^3
Remark :	SSc
Version :	09.03.2021
Limit value type (country of origin) :	MAK (CH)
Limit value :	2 ppm / 3 mg/m^3

Remark :	SSc
Version :	09.03.2021
Limit value type (country of origin) :	STEL (EC)
Limit value :	10 ppm / 15 mg/m³
Version :	20.06.2019
Limit value type (country of origin) :	TWA (EC)
Limit value :	5 ppm / 8 mg/m³
Version :	20.06.2019

DNEL-/PNEC-values

DNEL/DMEL

HYDROGEN CHLORIDE ; CAS No. : 7647-01-0

Limit value type :	DNEL worker (local)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	8 mg/m³
Limit value type :	DNEL worker (local)
Exposure route :	Inhalation
Exposure frequency :	Short-term
Limit value :	15 mg/m³

PNEC

HYDROGEN CHLORIDE ; CAS No. : 7647-01-0

Limit value type :	PNEC (Aquatic, freshwater)
Exposure route :	Water (Including sewage plant)
Limit value :	0,036 mg/l
Limit value type :	PNEC (Aquatic, marine water)
Exposure route :	Water (Including sewage plant)
Limit value :	0,036 mg/l

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Wear suitable safety goggles in case of splash.

Suitable eye protection

EN 166.

Skin protection

Hand protection

Suitable gloves type : EN 374.
Suitable material : NBR (Nitrile rubber)
Breakthrough time : 480 min.
Thickness of the glove material : 0.4 mm
Remark : The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values

Suitable respiratory protection apparatus

Combination filtering device
Type : E-P2 / E-P3

Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

General information

P280 - Wear protective gloves/protective clothing and eye/face protection. P362 - Take off contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. P362+P364 - Take off contaminated clothing and wash it before reuse. P264 - Wash hands thoroughly after handling.

8.3 Additional information

No tests have been performed. Selection made for preparations according to the best available knowledge and information on ingredients. In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid

Colour : colourless

Odour

stinging

Safety characteristics

Melting point/freezing point :	(1013 hPa)	approx.	0	°C	
Initial boiling point and boiling range :	(1013 hPa)	approx.	96	°C	
Flash point :			not relevant		DIN EN ISO 13736
Auto-ignition temperature :			not relevant		
Flammability :			non-flammable		
Lower explosion limit :			not relevant		
Upper explosion limit :			not relevant		
Vapour pressure :	(50 °C)		not relevant		
Density :	(20 °C)	approx.	1,1	g/cm^3	
Water solubility :	(20 °C)		completely miscible		
pH :	(20 °C / 10 g/l)		1,6		in aqueous solution
Cinematic viscosity :	(20 °C)	approx.	1	mm^2/s	
Relative vapour density :	(20 °C)		not determined		
Maximum VOC content (EC) :			0	Weight-%	
Maximum VOC content (Switzerland) :			0	Weight-%	
Corrosive to metals :			May be corrosive to metals.		

9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Violent reaction with: Alkali (lye).

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

10.3 Possibility of hazardous reactions
Thermal decomposition can lead to the escape of irritating gases and vapours. Hydrochloric gas

10.4 Conditions to avoid
No information available.

10.5 Incompatible materials
Metal, base

10.6 Hazardous decomposition products
Hydrochloric gas
Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

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

Acute toxicity

Acute oral toxicity

Parameter :	ATEmix
Exposure route :	Oral
Effective dose :	> 2000 mg/kg

Acute dermal toxicity

Parameter :	ATEmix
Exposure route :	Dermal
Effective dose :	> 2000 mg/kg

Acute inhalation toxicity

Parameter :	ATEmix
Exposure route :	Inhalation
Effective dose :	> 20 mg/m^3
Parameter :	LC50 (HYDROGEN CHLORIDE ; CAS No. : 7647-01-0)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	3124 ppm

Corrosion

Skin corrosion/irritation
irritant.

Serious eye damage/eye irritation
irritant.

Irritation to respiratory tract
non-irritant.

Respiratory or skin sensitisation
Based on available data, the classification criteria are not met.

Skin sensitisation
No further relevant information available.

Sensitisation to the respiratory tract
No further relevant information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity
No indication of human carcinogenicity.

Germ cell mutagenicity

Ames test negative.

Reproductive toxicity

No indications of human reproductive toxicity exist.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2 Information on other hazards

Endocrine disrupting properties

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

Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

Other adverse effects

Frequently or prolonged contact with skin may cause dermal irritation. Has degreasing effect on the skin. Irritating to eyes, respiratory system and skin.

Additional information

Preparation not tested. The statement is derived from the properties of the single components.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter :	LC50 (HYDROGEN CHLORIDE ; CAS No. : 7647-01-0)
Species :	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	3,98 - 4,46
Exposure time :	4 D

Chronic (long-term) toxicity to aquatic invertebrate

Parameter :	NOEC (HYDROGEN CHLORIDE ; CAS No. : 7647-01-0)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	5,5
Exposure time :	48 h
Method :	OECD 202
Parameter :	NOEC (HYDROGEN CHLORIDE ; CAS No. : 7647-01-0)
Species :	Chlorella vulgaris
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	5
Exposure time :	72 h
Parameter :	LOEC (HYDROGEN CHLORIDE ; CAS No. : 7647-01-0)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	5
Exposure time :	48 h
Method :	OECD 202
Parameter :	LOEC (HYDROGEN CHLORIDE ; CAS No. : 7647-01-0)
Species :	Chlorella vulgaris
Evaluation parameter :	Acute (short-term) algae toxicity

Effective dose : 4,5
Exposure time : 72 h
Method : OECD 201

Acute (short-term) toxicity to algae and cyanobacteria

Parameter : EC50 (HYDROGEN CHLORIDE ; CAS No. : 7647-01-0)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : 4,92
Exposure time : 48 h
Method : OECD 202
Parameter : EC50 (HYDROGEN CHLORIDE ; CAS No. : 7647-01-0)
Species : Chlorella vulgaris
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : 4,7 - 4,82
Exposure time : 72 h
Method : OECD 201

Toxicity to microorganisms

Parameter : EC50 (HYDROGEN CHLORIDE ; CAS No. : 7647-01-0)
Species : Bacteria toxicity
Effective dose : 5 - 5,5
Exposure time : 3 h

12.2 Persistence and degradability

According to the recipe, contains no AOX. The surfactant contained in this mixture complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil

No information 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.

12.6 Endocrine disrupting properties

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

12.7 Other adverse effects

No information available.

12.8 Additional ecotoxicological information

After neutralisation, reduction in toxic effects is observed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Ordinance on the avoidance and disposal of waste (ADWO) SR 814.600.

Before intended use

Waste code according to the lists for the movement of waste

07 06 01* (Aqueous washing liquids and mother liquors)
20 01 29* (Detergents containing hazardous substances)

Other disposal recommendations

Dispose of waste according to applicable legislation. Dispose of contents/ container to an approved waste disposal plant. Contaminated packages must be completely emptied and can be re-used following proper cleaning (Water (with cleaning agent)). Handle contaminated packages in the same way as the substance itself.

13.2 Additional information

The allocation of waste identity numbers/waste descriptions must be carried out according to the VVEA, specific to the industry and process.

SECTION 14: Transport information

14.1 UN number

UN 1760

14.2 UN proper shipping name

Land transport (ADR/RID)
CORROSIVE LIQUID, N.O.S. (HYDROGEN CHLORIDE)

Sea transport (IMDG)
CORROSIVE LIQUID, N.O.S. (HYDROGEN CHLORIDE)

Air transport (ICAO-TI / IATA-DGR)
CORROSIVE LIQUID, N.O.S. (HYDROGEN CHLORIDE)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) :	8
Classification code :	C9
Hazard identification number (Kemler No.) :	80
Tunnel restriction code :	E
Special Provisions :	LQ 5 l · E 1
Hazard label(s) :	 8

Sea transport (IMDG)

Class(es) :	8
EmS-No. :	F-A / S-B
Special Provisions :	LQ 5 l · E 1
Hazard label(s) :	 8

Air transport (ICAO-TI / IATA-DGR)

Class(es) :	8
Special Provisions :	E 1
Hazard label(s) :	 8

14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID) : No
Sea transport (IMDG) : No
Air transport (ICAO-TI / IATA-DGR) : No

14.6 Special precautions for user

None

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 legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 3, 75

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations (EU)

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

< 5 % anionic surfactants

National regulations

Other regulations, restrictions and prohibition regulations

Switzerland

Chemicals Ordinance, ChemO (SR 813.11)
Chemical Risk Reduction Ordinance, ORRChem (SR 814.81)

15.2 Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes

01. Unique Formula Identifier · 15. Restrictions on use

16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (Europäisches Übereinkommen über die Beförderung gefährlicher Güter auf der Straße)
AOX: adsorbierbare organisch gebundene Halogene
AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen
CAS: Chemical Abstracts Service (Unterabteilung der American Chemical Society)
CLP: Verordnung (EG) Nr. 1272/2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen (Classification Labelling and Packaging)
EAK / AVV: europäischer Abfallartenkatalog / Abfallverzeichnis-Verordnung
ECHA: Europäische Chemikalienagentur (European Chemicals Agency)
EINECS: : Altstoffverzeichnis (European Inventory of Existing Commercial Chemical Substances)
GHS: Global harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien (Globally Harmonized System of Classifiaction and Labelling of Chemicals)
IATA: Internationale Luftverkehrs-Vereinigung (International Air Transport Association)
ICAO: Internationale Zivilluftfahrtorganisation (International Civil Aviation Organization)
IMDG: Gefahrgutkennzeichnung für gefährliche Güter im Seeschiffverkehr (International Maritime Code for Dangerous Goods)
RID: Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr (Règlement concernant le transport international ferroviaire de marchandises dangereuses)
TRGS: Technische Regel für den Umgang mit Gefahrstoffen
VbF: Verordnung über brennbare Flüssigkeiten
VOC: flüchtige organische Verbindung (volatile organic compound)
VVEA: Verordnung über die Vermeidung und die Entsorgung von Abfällen
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

16.3 Key literature references and sources for data

DGUV: GESTIS-Stoffdatenbank
ECHA: Classification And Labelling Inventory

ECHA: Pre-registered Substances
ECHA: Registered Substances
EC_Safety Data Sheet of Suppliers
ESIS: European Chemical Substances Information System
GDL: Gefahrstoffdatenbank der Länder
UBA Rigoletto: Wassergefährdende Stoffe
Regulation (EC) No. 1907/2006 of the European Parliament and of the Council
|-> COMMISSION REGULATION (EU) 2020/878 of 18 June 2020
Regulation (EC) No. 1272/2008 of the European Parliament and of the Council

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
Evaluation :
Met. Corr. 1 : UN Test, Part III of sub-section 37.4
Skin Irrit. 2 : Calculation method.
Eye Irrit. 2 : Calculation method.
STOT SE 3 : Calculation method.

16.5 Relevant H- and EUH-phrases (Number and full text)

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

16.6 Training advice

None

16.7 Additional information

None

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.