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

1.1. Product identifier

Product name: Randy's Rust Off
Product code: CH12585RRO

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

1.3. Details of the supplier of the safety data sheet

Purple Rhino's SoftWash Systems
Unit 14 Henwood Business Centre
TN24 8DH Ashford, Kent - United Kingdom T
+44 (0)800 496 098
info@softwash-systems.com

1.3. Details of the supplier of the safety data sheet

Emergency tel: 0800 496 098 (Office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to (EC) NO 1272/2008

Hazard Class/Category of danger	Hazard Statements	Target Organs
Corrosive to metals / Category 1	H290	
Skin corrosion / Category 1B	H314	
Specific target organ toxicity - single exposure / Category 3	H335	Respiratory system

Classification according to EU Directives 67/548/EEC or 1999/45/EC
For the full text of the R-phrases mentioned in this Section, see Section 16.
Most important adverse effects

Directive 67/548/EEC or 1999/45/EC

Hazard symbol / Category of danger	Risk phrases
Corrosive (C)	R34
Irritant (Xi)	R37

Human Health :	See section 11 for toxicological information.
Physical and chemical hazards:	See section 9 for physicochemical information.
Potential environmental effects:	See section 12 for environmental information.

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2.2. Label elements

Classification according to Regulation (EC) No 1272/2008

Hazard Class	Hazard Category	Hazard Statements
Causes severe Eye Damage	Category 1A	H318

Labelling according to Regulation (EC) No 1272/2008

Hazard Symbols:
GH505 Corrosion

Signal word:	Danger	
Hazard statements:	H290	May be corrosive to metals.
	H314	Causes severe skin burns and eye damage.
	H335	May cause respiratory irritation.
Precautionary statements		
Prevention:	P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:	P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308	IF exposed or concerned:
	P310	Immediately call a POISON CENTER or doctor/ physician.

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Hazardous components which must be listed on the label:
• hydrochloric acid

Disposal:
P501: Dispose of contents/container to in accordance with local/national regulations

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

Section 3: Composition/information on ingredients

Chemical nature : Aqueous solution

3.2. Mixtures

Name	EC No	CAS-No	Registration No	Classification 67/548/EEC	Classification EC/1272/2008	Concentration Range
Hydrochloric Acid	231-595-7	7647-01-0	01-2119484862 -27-xxxx	Corrosive: C: R34 Irritant: Xi: R37	Met. Corr.1 - H290 STOT SE3 - H335 Skin Corr. 1B - H314	>=25% - <=38%

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: First aid measures

4.1. Description of first aid measures

General advice: Take off all contaminated clothing immediately.
If inhaled: If unconscious place in recovery position and seek medical advice. Remove to fresh air.
In case of skin contact: Wash off immediately with soap and plenty of water. Call a physician immediately.
In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.
If swallowed : Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting - seek medical advice.

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

Symptoms : corrosive effects
Effects : See Section 11 for more detailed information on health effects and symptoms.

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

Treatment : Treat symptomatically.

Section 5: Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media: The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting: Under fire conditions: Hydrogen chloride gas, Gives off hydrogen by reaction with metals.

5.3. Advise for fire-fighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.Wear appropriate body protection (full protective suit)

Further information : Cool closed containers exposed to fire with water spray. Heating will cause a pressure rise - with risk of bursting.Suppress (knock down) gases/vapours/mists with a water spray jet.Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Keep people away from and upwind of spill/leak. Provide adequate ventilation. Avoid contact with the skin and the eyes. Do not breathe vapours.

6.2. Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

6.3. Methods and material for containment and cleaning up

Methods and materials for containment and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal. Flush away residuals with plenty of water.
Further information:	Treat recovered material as described in the section ”Disposal considerations”..

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

Section 7: Handling and storage

7.1. Precaution for safe handling

Advice on safe handling:	Handle and open container with care. Use personal protective equipment. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.
Hygiene measures:	Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:	Keep in an area equipped with acid resistant flooring. Suitable materials for containers: glass; Polypropylene; polyethylene containers; Unsuitable materials for containers: Metals
Advice on protection against fire and explosion:	The product is not flammable. Gives off hydrogen by reaction with metals. Risk of explosion.
Further information on storage conditions:	Keep container tightly closed. Keep in a well-ventilated place. Keep away from heat.
Advice on common storage:	Keep away from food, drink and animal feedingstuffs. Corrosive in contact with metals Materials to avoid

sodium hypochlorite alkalis

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German storage class : 8 Corrosive Substances

7.3. Specific end use(s)

No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Component: hydrochloric acid
CAS-No. 7647-01-0

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Acute - local effects, Inhalation : 15 mg/m3
DNEL
Workers, Long-term - local effects, Inhalation : 8 mg/m3

Predicted No Effect Concentration (PNEC)

Fresh water	: 36 µg/l
Marine water	: 36 µg/l
Intermittent releases	: 45 µg/l
Sewage treatment plant (STP)	: 36 µg/l

Other Occupational Exposure Limit Values

EU ELV, Short Term Exposure Limit (STEL): 10 ppm, 15 mg/m3
Indicative
EU ELV, Time Weighted Average (TWA): 5 ppm, 8 mg/m3
Indicative

EH40 WEL, Time Weighted Average (TWA):, Gas and aerosol mists. 1 ppm, 2 mg/m3

EH40 WEL, Short Term Exposure Limit (STEL):, Gas and aerosol mists. 5 ppm, 8 mg/m3

ELV (IE), Time Weighted Average (TWA): 5 ppm, 8 mg/m3
Indicative OELV

ELV (IE), Short Term Exposure Limit (STEL): 10 ppm, 15 mg/m3
Indicative OELV

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8.2. Exposure controls

Appropriate engineering controls
Refer to protective measures listed in sections 7 and 8.

Personal protective equipment
Respiratory protection

Advice:	**In case of insufficient ventilation, wear suitable respiratory equipment. Required, if exposure limit is exceeded (e.g. OEL). Combination filter:E-P2**
Hand protection Advice:	**The glove material has to be impermeable and resistant to the product / the substance / the preparation. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves should be replaced at first signs of wear.**
Material	**butyl-rubber**
Break through time	**>=8h**
Glove thickness	**0.5 mm**
Material	**Nitrile rubber**
Break through time	**>=8h**
Glove thickness	**0.35 mm**
Material	**polychloroprene**
Break through time	**>=8h**
Glove thickness	**0.5 mm**
Material	**Fluorinated rubber**
Break through time	**>=8h**
Glove thickness	**0.4 mm**
Material	**Polyvinylchloride**
Break through time	**>=8h**
Glove thickness	**0.5 mm**
Eye protection Advice:	**Tightly fitting safety goggles**

Skin and body protection Advice: Acid resistant protective clothing.

8.3. Environmental controls

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General advice: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemiacal properties

Form :	liquid
Colour :	Amber
Odour :	stinging
Odour Threshold :	no data available
pH :	< 0.1 (20 °C)
Solidification point :	-40 °C
Boiling point/boiling range :	ca. 90 °C
Flash point :	not applicable
Evaporation rate :	no data available
Flammability (solid, gas) :	does not ignite
Upper explosion limit :	no data available
Lower explosion limit :	no data available
Vapour pressure :	21.8 hPa (20 °C)
Relative vapour density :	no data available
Density :	1.15 - 1.17 g/cm3 (20 °C)
Water solubility :	completely miscible
Partition coefficient: n-octanol/water :	log Kow -0.25 log Pow
Auto-ignition temperature :	no data available
Thermal decomposition :	no data available
Viscosity, dynamic:	1.74 mPa.s (20 °C)
Explosivity:	Product is not explosive.
Oxidizing properties:	no data available

9.2. Other information

Corrosion to metals: Corrosive to metals

Section 10: Stability and reactivity

Other information:
None

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

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10.2. Chemical stability

Advice : No decomposition if stored and applied as directed. Decomposes on heating.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hydrogen, by reaction with metals Explosive properties May develop chlorine if mixed with sodium hypochlorite or oxidizing agents (e.g. potassium permanganate, magnesium oxide and hydrogen peroxide).

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Metals, sodium hypochlorite, Amines, fluorine, Strong oxidizing agents, Chlorite, Cyanides, alkalines

10.6. Hazardous decomposition products

Hydrogen chloride gas products

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Oral: no data available
Inhalation: no data available
Dermal: Please find this information in the listing of the component/components below in the MSDS.

Irritation

Ingestion: Swallowing of significant amounts may lead to discomfort, vomiting and diarrhea.
Skin: Causes skin burns.
Eyes: Causes eye burns.

Sensitisation

Result Please find this information in the listing of the component/components below in the MSDS.

CMR effects

CMR Properties

Carcinogenicity: Please find this information in the listing of the component/components below in the MSDS.
Mutagenicity: Please find this information in the listing of the component/components below in the MSDS.
Teratogenicity: Please find this information in the listing of the component/components below in the MSDS.
Reproductive toxicity: Please find this information in the listing of the component/components below in the MSDS.

Specific Target Organ Toxicity

Single exposure

Inhalation : Target Organs: Respiratory system May cause respiratory irritation.

Repeated exposure

remark: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties
Repeated dose toxicity: no data available

Aspiration hazard: No aspiration toxicity classification

Further information:
Other relevant toxicity information : If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Component: hydrochloric acid CAS-No. 7647-01-0

Acute toxicity:
Oral: no data available
Inhalation: no data available
Dermal:
LD50 Dermal: > 5010 mg/kg (rabbit)

Irritation
Skin: corrosive effects (rabbit)
Eyes: corrosive effects (rabbit) Risk of serious damage to eyes.
Sensitisation: not sensitizing (guinea pig) (Maximisation Test)

CMR effects
CMR Properties
Carcinogenicity : Did not show carcinogenic effects in animal experiments.
Mutagenicity : In vitro tests did not show mutagenic effects
Teratogenicity : no data available
Reproductive toxicity : Animal testing did not show any effects on fertility.

Specific Target Organ Toxicity
Single exposure: May cause respiratory irritation.
Repeated exposure: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties
Aspiration hazard: No aspiration toxicity classification

Section 12: Ecological information

12.1. Toxicity

Component:	hydrochloric acid	CAS-No. 7647-01-0
Fish	LC50	7.45 mg/l (Oncorhynchus mykiss; 96 h)
	LC50	24.6 mg/l (Lepomis macrochirus; 96 h)

Toxicity to daphnia and other aquatic invertebrates		
	EC50	0.492 mg/l (Daphnia magna; 48 h)
algae	EC50	0.78 mg/l (Pseudokirchneriella subcapitata; 72 h)

12.2. Persistence

Biodegradability: Inorganic product which is not removable from water by biological processes.

12.3. Bioaccumalative potential

Bioaccumulation is not expected.

12.4. Mobility in soil

Not expected to adsorb on soil.

12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Additional ecological information : Harmful effects to aquatic organisms due to pH-shift. Neutralization is normally necessary before waste water is discharged into water treatment plants. Do not flush into surface water or sanitary sewer system.

Section 13: Disposal considerations

General information

13.1. Waste treatment methods

Product: Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging: Empty remaining contents. Packagings that cannot be cleaned are to be disposed of in the same manner as the product. Dispose of in accordance with local regulations.

European Waste Cat No.: No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

Section 14: Transport information

14.1. UN Number

1789

14.2. UN Proper shipping name

ADR :	HYDROCHLORIC ACID
RID :	HYDROCHLORIC ACID
IMDG :	HYDROCHLORIC ACID

14.3. Transport hazard classes

ADR-Class	: 8
(Labels; Classification Code; Hazard identification No; Tunnel restriction code)	: 8; C1; 80;
RID-Class	(E) : 8
(Labels; Classification Code; Hazard identification No)	: 8; C1; 80
IMDG-Class	: 8
(Labels; EmS)	: 8; F-A, S-B

14.4. Packing group

ADR	:	**III**
IMDG	:	**III**

14.5. Environmental hazards

Labelling according to 5.2.1.8 ADR	:	**No**
Labeling according to 5.2.1.8 RID	:	**No**
Labelling according to 5.2.1.6.3 IMDG	:	**No**
Classification as environmentally hazardous according to 2.9.3 IMDG	:	**No**
Classified as 'P' Marine pollutant according to 2.10 IMDG	:	**No**

14.6. Special precautions for user

No special precautions

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

IMDG: Not applicable

Section 15: Regulatory information

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

UK ISR: hydrochloric acid: Annual reporting level threshold: 10,000 kg

Other regulations: Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

hydrochloric acid:

EU. Regulation 273/2004, Drug Precursors, Category 3 Scheduled substance
Combined Nomenclature (CN) code: 2806 10 00

EU. Regulation No 1451/2007 [Biocides], Annex I, Active substances identified as existing (OJ (L 325)
Listed EC Number: 231-595-7

EU. Directive 98/8/EC, Annex 1, Active substances in biocidal products
Special provisions may apply; see text of legislation. Minimum purity: 999 g/kg
Private area and public health area disinfectants and other biocidal products

EU. Directive 98/8/EC, Annex 1, Active substances in biocidal products
Expiry Date of Inclusion: 30 Apr 2024

EU. Directive 98/8/EC, Annex 1, Active substances in biocidal products
Inclusion Date: 1 May 2014

EU. Directive 98/8/EC, Annex 1, Active substances in biocidal products
Deadline for Compliance: 30 Apr 2016

Notification status
hydrochloric acid:

Regulatory List	Notification	Notification number
AICS	YES	
DSL	YES	
INV (CN)	YES	
ENCS (JP)	YES	(1)-215
ISHL (JP)	YES	(1)-215
TSCA	YES	
EINECS	YES	231-595-7
KECI (KR)	YES	97-1-203

KECI (KR)	YES	KE-20189
PICCS (PH)	YES	

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

Section 16: Other information

Full text of R-phrases referred to under sections 2 and 3.

R34	Causes burns.
R37	Irritating to respiratory system.

Full text of H-Statements referred to under sections 2 and 3.

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

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

SDS EU (REACH Annex II)
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product