

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



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

1.1 Product identifier

Trade name : VROOAM RUST & CALCIUM REMOVER
 Registration number (REACH) : not relevant (mixture)
 Product code(s) : 74201

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

Relevant identified uses : Cleaning agent
 Industrial uses
 Professional uses
 Uses advised against : Do not use for squirting or spraying. Do not use for products which come into direct contact with the skin. Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

VROOAM Powersports Lubricants INT. B.V.
 Aventurijn 300
 3316 LB Dordrecht (NL)
 0031 (0) 78 750 1632
 www.vrooam-lubricants.com
 info@vrooam-lubricants.com

· Further information obtainable from: Product Safety Department

1.4. Emergency telephone number: 0031 (0) 78 750 16 32 (9 AM to 5 PM, Monday to Friday)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Cate- gory	Hazard class and cat- egory	Hazard statement
2.16	substance or mixture corrosive to metals	1	Met. Corr. 1	H290
3.10	acute toxicity (oral)	4	Acute Tox. 4	H302
3.2	skin corrosion/irritation	1	Skin Corr. 1	H314
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318

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

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

2.2 Label elements

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

- Signal word danger

- Pictograms



GHS05, GHS07

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



- Hazard statements

H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.

- Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 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.
 P390 Absorb spillage to prevent material damage.
 P501 Dispose of contents/container to industrial combustion plant.

- Hazardous ingredients for labelling

Isotridecanol, ethoxylated, phosphoric acid

2.3 Other hazards

Results of PBT and vPvB assessment





This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture							
Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes	Specific Conc. Limits	M-Factors
Orthophosphoric acid	CAS No 7664-38-2 EC No 231-633-2 Index No 015-011-00-6 REACH Reg. No 01-2119485924-24-xxxx	25 – <50	Met. Corr. 1 /H290 Acute Tox. 4 /H302 Skin Corr. 1B /H314 Eye Dam. 1 / H318	 	IOELV	Met. Corr. 1; H290: C ≥ 5 % Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Dam. 1; H318: C ≥ 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %	
Isotridecanol, ethoxylated	CAS No 69011-36-5 EC No 500-241-6 REACH Reg. No 01-2119976362-32-xxxx	5 – < 10	Acute Tox. 4 / H302 Eye Dam. 1 / H318	 			

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes	Specific Conc. Limits	M-Factors
Oxalic acid	CAS No 144-62-7 6153-56-6 EC No 205-634-3 REACH Reg. No 01- 2119534576 -33-xxxx	1 – < 5	Acute Tox. 4 / H302 Acute Tox. 4 / H312 Eye Dam. 1 / H318	 			

Notes

IOELV : Substance with a community indicative occupational exposure limit value

For full text of H-phrases: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

Self-protection of the first aider

Provision of sufficient ventilation. Wear suitable protective clothing, gloves and eye/face protection.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Substance or mixture corrosive to metals.

Hazardous combustion products

Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂), Phosphorus oxides (P_xO_y)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance. Self-contained breathing apparatus (SCBA). SCBA with a chemical protection suit only where personal (close) contact is likely.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Follow emergency procedures such as the need to evacuate the danger area or to consult an expert. Remove persons to safety. Provision of sufficient ventilation. Prevent skin contact. Avoid inhaling sprayed product. Collection and use of expertise.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains

Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

- Handling of incompatible substances or mixtures

Do not mix with alkali.

- Keep away from

Caustic solutions

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Corrosive conditions

Store in corrosive resistant container with a resistant inner liner.

Control of effects

Protect from sunlight.

Protect against external exposure, such as

Frost

- Packaging compatibilities

Keep only in original container. Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

Cleaning agent. Industrial uses. Professional uses.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Notation	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Source
EU	orthophosphoric acid	7664-38-2		IOELV		1		2			2000/39/EC
GB	orthophosphoric acid	7664-38-2		WEL		1		2			EH40/2005

Notation

Ceiling-C : ceiling value is a limit value above which exposure should not occur

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



STEL : short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA : time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Isotridecanol, ethoxylated	69011-36-5	DNEL	294 mg/m ³	human, inhalatory	worker (industry)	chronic – systemic effects
Isotridecanol, ethoxylated	69011-36-5	DNEL	2,080 mg/kg bw/day	human, dermal	worker (industry)	chronic – systemic effects
Oxalic acid	144-62-7 6153-56-6	DNEL	3.11 mg/m ³	human, inhalatory	worker (industry)	chronic – systemic effects
Oxalic acid	144-62-7 6153-56-6	DNEL	0.882 mg/kg bw/day	human, dermal	worker (industry)	chronic – systemic effects

Relevant PNECs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Isotridecanol, ethoxylated	69011-36-5	PNEC	0.015 mg/l	aquatic organisms	water	intermittent release
Isotridecanol, ethoxylated	69011-36-5	PNEC	0.074 mg/l	aquatic organisms	freshwater	short-term (single instance)
Isotridecanol, ethoxylated	69011-36-5	PNEC	0.007 mg/l	aquatic organisms	marine water	short-term (single instance)
Isotridecanol, ethoxylated	69011-36-5	PNEC	1.4 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Isotridecanol, ethoxylated	69011-36-5	PNEC	0.604 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Isotridecanol, ethoxylated	69011-36-5	PNEC	0.06 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Isotridecanol, ethoxylated	69011-36-5	PNEC	0.1 mg/kg	terrestrial organisms	soil	short-term (single instance)
Oxalic acid	144-62-7 6153-56-6	PNEC	0.16 mg/l	aquatic organisms	freshwater	short-term (single instance)
Oxalic acid	144-62-7 6153-56-6	PNEC	0.016 mg/l	aquatic organisms	marine water	short-term (single instance)
Oxalic acid	144-62-7 6153-56-6	PNEC	1,550 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



Eye/face protection

Wear eye/face protection. Wear face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leaktightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

- Type of material

NBR: acrylonitrile-butadiene rubber

- Material thickness

> 0.35 mm

- Breakthrough times of the glove material

>480 minutes (permeation: level 6)

- Other protection measures

Protective clothing against liquid chemicals. Footwear protecting against chemicals. Preventive skin protection (barrier creams/ointments) is recommended. Take recovery periods for skin regeneration. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Type: ABEK (combined filters against gases and vapours, colour code: Brown/Grey/Yellow/Green).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Colour	brown - clear
Odour	odourless

Other safety parameters

pH (value)	1 (20 °C) (acid)
Melting point/freezing point	not determined
Initial boiling point and boiling range	>100 °C
Flash point	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapour pressure	2.339 kPa at 20 °C (calculated value, referring to a component of the mixture)
Density	1.15 g/cm ³ at 20 °C
Vapour density	this information is not available

Solubility(ies)

- Water solubility	miscible in any proportion
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Partition coefficient

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	250 °C
Viscosity	not determined
Explosive properties	none
Oxidising properties	none

9.2 Other information

VOC content	6.862 %
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SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". Substance or mixture corrosive to metals.

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

May be corrosive to metals.

10.5 Incompatible materials

Bases, Oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Harmful if swallowed.

- Acute toxicity estimate (ATE)

Oral 1,540 mg/kg

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
Orthophosphoric acid	7664-38-2	oral	500 mg/kg
Isotridecanol, ethoxylated	69011-36-5	oral	500 mg/kg
Acute toxicity estimate (ATE) of components of the mixture			

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



Name of substance	CAS No	Exposure route	ATE
Oxalic acid	144-62-7 6153-56-6	oral	500 mg/kg
Oxalic acid	144-62-7 6153-56-6	dermal	1,100 mg/kg

Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Isotridecanol, ethoxylated	69011-36-5	oral	LD50	>2,000 mg/kg	rat
Isotridecanol, ethoxylated	69011-36-5	inhalation: dust/mist	LC50	>1.6 mg/l/4h	rat
Isotridecanol, ethoxylated	69011-36-5	dermal	LD50	5,960 mg/kg	rabbit
Oxalic acid	144-62-7 6153-56-6	dermal	LD50	20,000 mg/kg	rabbit

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Orthophosphoric acid	7664-38-2	EC50	>100 mg /l	aquatic invertebrates	48 h
Orthophosphoric acid	7664-38-2	ErC50	>100 mg /l	algae	72 h
Isotridecanol, ethoxylated	69011-36-5	LL50	2.5 mg/l	fish	96 h
Isotridecanol, ethoxylated	69011-36-5	EC50	1.5 mg/l	aquatic invertebrates	48 h
Name of substance	CAS No	Endpoint	Value	Species	Exposure time

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



Oxalic acid	144-62-7 6153-56-6	LC50	325 mg/l	fish	48 h
Oxalic acid	144-62-7 6153-56-6	EC50	162.2 mg/l	aquatic invertebrates	48 h
Oxalic acid	144-62-7 6153-56-6	ErC50	<32.31 mg/l	algae	48 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Orthophosphoric acid	7664-38-2	EC50	>1,000 mg/l	microorganisms	3 h
Oxalic acid	144-62-7 6153-56-6	ErC50	<38.46 mg/l	algae	24 h
Oxalic acid	144-62-7 6153-56-6	EC50	<26.45 mg/l	algae	24 h

12.2 Persistence and degradability

Degradability of components of the mixture							
Name of substance	CAS No	EC No	Process	Degradation rate	Time	Method	Source
Isotridecanol, ethoxylated	69011-36-5	500-241-6	DOC removal	82 %	28 d	ECHA	

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Isotridecanol, ethoxylated	69011-36-5	232.5	4.55 – 6.4 (pH value: 6.5, 20 °C)	
Oxalic acid	144-62-7 6153-56-6		-1.7 (pH value: <2, 23 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Endocrine disrupting potential

None of the ingredients are listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



RUBRIEK 14: Informatie met betrekking tot het vervoer

14.1 UN number

1805

14.2 UN proper shipping name

PHOSPHORIC ACID, SOLUTION

14.3 Transport hazard class(es)

Class 8 (corrosive substances)

14.4 Packing group

III (substance presenting low danger)

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

UN number	1805
Proper shipping name	PHOSPHORIC ACID, SOLUTION
Class	8
Classification code	C1
Packing group	III
Danger label(s)	8



Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	E
Hazard identification No	80
Emergency Action Code	2R

International Maritime Dangerous Goods Code (IMDG)

UN number	1805
Proper shipping name	PHOSPHORIC ACID, SOLUTION
Class	8
Marine pollutant	-
Packing group	III
Danger label(s)	8

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



Special provisions (SP) 223
 Excepted quantities (EQ) E1
 Limited quantities (LQ) 5 L
 EmS F-A, S-B
 Stowage category A
 Segregation group 1 – Acids

International Civil Aviation Organization (ICAO-IATA/DGR)

UN number 1805
 Proper shipping name Phosphoric acid, solution
 Class 8
 Packing group III
 Danger label(s) 8



Special provisions (SP) A3
 Excepted quantities (EQ) E1
 Limited quantities (LQ) 1 L

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

Deco-Paint Directive (2004/42/EC)

VOC content	1.742 %
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Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content	6.862 %
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Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

none of the ingredients are listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

none of the ingredients are listed

Regulation 648/2004/EC on detergents

Labelling of contents	
Constituents	Weight % content (or range)
non-ionic surfactants	5 % or over but less than 15 %

15.2 Chemical Safety Assessment

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Indication of changes (revised safety data sheet)			
Section	Former entry (text/value)	Actual entry (text/value)	Safetyrelevant
2.1		Classification according to Regulation (EC) No 1272/2008 (CLP): change in the listing (table)	yes
2.2		- Pictograms: change in the listing (table)	yes
2.2		- Hazard statements: change in the listing (table)	yes
2.2		- Precautionary statements: change in the listing (table)	yes
2.3	Other hazards: of no significance	Other hazards	yes
3.2		Description of the mixture: change in the listing (table)	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
8.1		Relevant DNELs of components of the mixture: change in the listing (table)	yes
8.1		Relevant PNECs of components of the mixture: change in the listing (table)	yes
11.1	Acute toxicity: Shall not be classified as acutely toxic.	Acute toxicity: Harmful if swallowed.	yes
11.1		- Acute toxicity estimate (ATE): change in the listing (table)	yes
11.1		Acute toxicity estimate (ATE) of components of the mixture: change in the listing (table)	yes
11.1		Acute toxicity of components of the mixture: change in the listing (table)	yes
11.1	Specific target organ toxicity - repeated exposure: The classification criteria for this hazard class are not met. Shall not be classified as a specific target organ toxicant (repeated exposure).	Specific target organ toxicity - repeated exposure: Shall not be classified as a specific target organ toxicant (repeated exposure).	yes
12.1		Aquatic toxicity (acute) of components of the mixture: change in the listing (table)	yes
12.1		Aquatic toxicity (chronic) of components of the mixture: change in the listing (table)	yes
12.2	Persistence and degradability: Data are not available.	Persistence and degradability	yes
12.3		Bioaccumulative potential of components of the mixture: change in the listing (table)	yes
12.6	Other adverse effects: Data are not available.	Other adverse effects	yes
14.7		Marine pollutant: -	yes
15.1	Restrictions according to REACH, Annex XVII: none of the ingredients are listed		yes
16		Abbreviations and acronyms: change in the listing (table)	yes
16		List of relevant phrases (code and full text as stated in chapter 2 and 3): change in the listing (table)	yes

Abbreviations and acronyms

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



Abbr.	Descriptions of used abbreviations
2000/39/EC	Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC
Acute Tox.	Acute toxicity
AND	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
log KOW	n-Octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
Met. Corr.	Substance or mixture corrosive to metals
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
SCBA	Self-contained breathing apparatus
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
SVHC	Substance of Very High Concern
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

SAFETY DATA SHEET

PRODUCT NAME: VROOAM RUST & CALCIUM REMOVER



Code	Text
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.