according to UK REACH Regulation

REGI-CLEAN_DESCALER_R34491_GHS

Revision date: 03.02.2020 Page 1 of 8

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

1.1. Product identifier

REGI-CLEAN DESCALER R34491 GHS

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

Use of the substance/mixture

Acid cleaner.

1.3. Details of the supplier of the safety data sheet

Company name: Reginox BV

Place: NL 7460 AB Rijssen

Post-office box: P.O. Box 82

NL 7460 AB Rijssen

e-mail: info@reginox.com Internet: www.reginox.com

Responsible Department: Nationaal Vergiftigingen Informatie Centrum (NVIC),

1.4. Emergency telephone +31 (0) 30 274 8888

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements

GB CLP Regulation

Precautionary statements

P102 Keep out of reach of children.

Additional advice on labelling

Ingredients according to Regulation (EC) No. 648/2004: <5% nonionic surfactants.

2.3. Other hazards

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

according to UK REACH Regulation

REGI-CLEAN_DESCALER_R34491_GHS

Revision date: 03.02.2020 Page 2 of 8

Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification (GB CLP Regulation)					
79-33-4	Latic Acid 80%					
	201-196-2					
	Skin Irrit. 2, Eye Dam. 1; H315 H318					
77-92-9	Citric Acid					
	201-069-1		01-2119457026-42			
	Eye Irrit. 2; H319					
54549-25-6	Decylglykosid					
	259-218-1					
	Eye Dam. 1; H318					

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity		
	Specific Conc. I	Specific Conc. Limits, M-factors and ATE			
77-92-9	201-069-1	Citric Acid	< 1 %		
	dermal: LD50 = >2000 mg/kg; oral: LD50 = 5040 mg/kg				

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

If experiencing symptoms: Call a doctor. Change contaminated clothing.

After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician immediately.

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

Repeated or prolonged contact with the product may cause irritation.

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

Symptomatic therapy.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. CO2, foam, powder, water spray-jet.

Unsuitable extinguishing media

High power water jet.

according to UK REACH Regulation

REGI-CLEAN_DESCALER_R34491_GHS

Revision date: 03.02.2020 Page 3 of 8

5.2. Special hazards arising from the substance or mixture

In case of fire, dangerous gases may form: e. g. carbon monoxide, carbon dioxide, sulphur oxides, ammonia and nitrogen oxides.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Prevent penetration of extinguishing water into surface and ground water and soil.

Additional information

Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains. Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Make sure that all applicable workplace limits are observed. Wear personal protection equipment. Keep away from unprotected people. Keep upwind.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Pump off larger quantities.

6.4. Reference to other sections

See section 8 for information on personal protection equipment. See section 13 for disposal information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Make sure that all applicable workplace limits are observed. Do not eat, drink, smoke or sneeze at the workplace. Wash hands after use.

Advice on protection against fire and explosion

Danger of explosion by exposure to base metals due to hydrogen evolution. The product itself does not burn.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. After work, wash hands and face. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Protect from frost. Protect from heat and direct sunlight. Keep container tightly closed.

Further information on storage conditions

Provide acid-resistant floor.

7.3. Specific end use(s)

No further information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

The lists valid during the making were used as basis.

according to UK REACH Regulation

REGI-CLEAN_DESCALER_R34491_GHS

Revision date: 03.02.2020 Page 4 of 8

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

For repeated or commercial use: Tightly sealed safety glasses.

Hand protection

For repeated or commercial use: Wear suitable gloves. solvent-resistant (NBK). 0,5 mm, >480 min

Skin protection

For repeated or commercial use: Workwear

Respiratory protection

Not required.

Environmental exposure controls

Section 6 an 7.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid Colour: clear

Odour: characteristic

Changes in the physical state

Boiling point or initial boiling point and 100 °C

boiling range:

Flash point: No further information available.

Explosive properties

The product is not explosiv.

Lower explosion limits:

Upper explosion limits:

No further information available.

No further information available.

PH-Value (at 20 °C):

2,4

Viscosity / dynamic:

No further information available.

Viscosity / kinematic:

No further information available.

Water solubility:

No further information available.

Solubility in other solvents

No further information available.

Vapour pressure:

Vapour pressure:

No further information available.

No further information available.

Density:

1,02 g/cm³

9.2. Other information

Other safety characteristics

Solvent content: No further information available. Solid content: No further information available.

Further Information

No other physico-chemical data were determined.

SECTION 10: Stability and reactivity

according to UK REACH Regulation

REGI-CLEAN_DESCALER_R34491_GHS

Revision date: 03.02.2020 Page 5 of 8

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

The product is chemically stable under normal environmental conditions.

10.3. Possibility of hazardous reactions

Reaction with metals to form hydrogen. Exothermic reaction with strong bases. Do not mix with substances containing chlorine - chlorine gas may develop.

10.4. Conditions to avoid

Protect from frost. Protect from heat and direct sunlight.

10.5. Incompatible materials

Hydrogen is released by reaction with metals.

10.6. Hazardous decomposition products

Not known.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicocinetics, metabolism and distribution

No data available

Acute toxicity

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

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
77-92-9	Citric Acid						
	oral	LD50 5040 mg/kg	0	Mouse.			
	dermal	LD50 >20 mg/kg	00	Ratte			

Irritation and corrosivity

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

Sensitising effects

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

No further information available.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

SECTION 12: Ecological information

12.1. Toxicity

according to UK REACH Regulation

REGI-CLEAN_DESCALER_R34491_GHS

Revision date: 03.02.2020 Page 6 of 8

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
79-33-4	Latic Acid 80%						
	Acute algae toxicity	ErC50 mg/l	3500		Alge		
	Acute crustacea toxicity	EC50	240 mg/l	48 h	Daphnia magna		
77-92-9	Citric Acid						
	Acute fish toxicity	LC50 mg/l	440-760	96 h	Carassius auratus	96 h	
	Acute algae toxicity	ErC50	640 mg/l		Scenedesmus quadricauda	7 d	
	Acute crustacea toxicity	EC50	120 mg/l	48 h	Daphnia magna	72 h	
	Acute bacteria toxicity	(EC50 mg/l)	10000		Pseudomonas putida	16 h	

12.2. Persistence and degradability

No further information available.

12.3. Bioaccumulative potential

No accumulation in the organism is expected.

12.4. Mobility in soil

The product is water soluble.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The substance in the mixture does 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 further information available.

Further information

Do not allow to enter drainage system, surface or ground water. Do not allow large quantities of product to reach sewage system or water bodies. After neutralisation, only a relatively small damaging effect of the resulting salts is still present.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND

INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by

hazardous substances; hazardous waste

Contaminated packaging

Water (with cleaning agent). @1304.BCompletely emptied packages can be recycled. 130074 Water (with cleaning agent).

according to UK REACH Regulation

REGI-CLEAN_DESCALER_R34491_GHS

Revision date: 03.02.2020 Page 7 of 8

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: N

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

1.00 - 09.05.2018

1.01 - 20.07.2018

1.02 - 30.07.2018

1.03 - 03.08.2018

1.04 - 20.08.2018

1.05 - 03.02.2020

Abbreviations and acronyms

ATE - Acute Toxicity Estimate CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 EINECS - European Inventory of Existing Commercial Chemical Substances CAS# - Chemical Abstract Service number PPE - Personal Protection Equipment LC50 - Lethal Concentration to 50 % of a test population RMM - Risk Management Measures PBT - Persistent, Bioaccumulative and Toxic vPvB - Very Persistent and Very Bioaccumulative STOT- SE: Specific Target Organ Toxicity - Single Exposure CSA - Chemical Safety Assessment EN - European Standard UN - United Nations ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road IATA - International Air Transport Association IMDG code - International Maritime Dangerous Goods RID - Regulations concerning the

according to UK REACH Regulation

REGI-CLEAN_DESCALER_R34491_GHS

Revision date: 03.02.2020 Page 8 of 8

International Carriage of Dangerous Goods by Rail WGK - Water Hazard Class

Relevant H and EUH statements (number and full text)

H315 Causes skin irritation.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

Further Information

The information is based on the current state of our knowledge, however, it does not represent an assurance of product properties and does not constitute a contractual legal relationship. Legal regulations and provisions are to be observed on your own responsibility. This safety data sheet replaces all previous copies. Previous editions are hereby invalid.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)