



# **Rex-Royal Milk System Cleaner**

## **Safety Data Sheet**

Rex-Royal AG  
Industriestrasse 34  
Dallikon/Zurich  
Switzerland  
CH-8108



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date: 19.01.2018

Version No: 8

Revision: 16.10.2020

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

- **1.1 Product identifier**
- **Trade name:** Milk System Cleaner
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation:** Coffee/Espresso machine/equipment cleaner
- **Uses advised against:** No further relevant information available.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**

Urnex Brands, Inc.	Urnex Brands, LLC
700 Executive Blvd.	Olympisch Stadion 24-28
Elmsford, NY 10523 USA	1076 DE Amsterdam, The Netherlands
Phone: +1-914-963-2042	NL Tel. +31.20.854.6030
Fax: +1-914-963-2145	
Email: info@urnex.com	
- **Further information obtainable from:**

Urnex Brands, Inc.	
700 Executive Blvd.	
Elmsford, NY 10523 USA	
Phone: +1-914-963-2042	
Fax: +1-914-963-2145	
Email: info@urnex.com	
- **1.4 Emergency telephone number:**

Tel.: (Infotrac): +1 (352) 323-3500
Tel.: 001-703-527-3887 (INTERNATIONAL COLLECT ACCEPTED)

### SECTION 2: Hazards identification


- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

<i>Xi; Irritant</i>
R36/38: Irritating to eyes and skin.
- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**
- 
- GHS07
- **Signal word** Warning

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**· Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

**· Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

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.

P362 Take off contaminated clothing.

P332+P313 **If skin irritation occurs:** Get medical advice/attention.P302+P352 **IF ON SKIN:** Wash with plenty of water.**· 2.3 Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not determined**· vPvB:** Not determined**SECTION 3: Composition/information on ingredients****· 3.2 Chemical characterisation: Mixtures****· Dangerous components:**

CAS: 9002-92-0 NLP: 500-002-6	Ethoxylated lauryl alcohol ☒ Xn R22; ☒ Xi R38-41 ☒ Eye Dam. 1, H318; ☒ Acute Tox. 4, H302; Skin Irrit. 2, H315	< 3%
CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6	sodium hydroxide ☒ C R35 ☒ Met. Corr.1, H290; Skin Corr. 1A, H314	< 1%

**· Regulation (EC) No 648/2004 on detergents / Labelling for contents**

non-ionic surfactants, EDTA and salts thereof, cationic surfactants	< 5%
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**· Additional information:** For the wording of the listed risk phrases refer to section 16.**SECTION 4: First aid measures****· 4.1 Description of first aid measures****· General information:**

Take affected persons out of danger area and lay down.

Immediately remove any clothing soiled by the product.

**· After inhalation:** Supply fresh air; consult doctor in case of complaints.**· After skin contact:**

Immediately rinse with water.

If skin irritation continues, consult a doctor.

**· After eye contact:**

Rinse opened eye for several minutes under running water.

Remove contact lenses, if present and easy to do. Continue rinsing.

Seek immediate medical advice.

**· After swallowing:**

Rinse out mouth and then drink plenty of water.

Seek immediate medical advice.

**· 4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.  
In case of fire, the following can be released:  
Carbon monoxide  
Carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
Cool endangered receptacles with water spray.  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation.  
Wear protective clothing.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.  
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
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**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Store under lock and key and out of the reach of children.

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- 7.3 **Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

### · 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

1310-73-2 sodium hydroxide (< 3%)

WEL Short-term value: 2 mg/m<sup>3</sup>

### · 8.2 Exposure controls

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Do not inhale gases / fumes / aerosols.

Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

The usual precautionary measures are to be adhered to when handling chemicals.

- **Respiratory protection:** Not necessary if room is well-ventilated.

- **Protection of hands:**



Protective gloves

Avoid direct contact with the chemical/ the product/ the preparation by organisational measures.

To avoid skin problems reduce the wearing of gloves to the required minimum.

Check protective gloves prior to each use for their proper condition.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

> 480 min

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **For the permanent contact gloves made of the following materials are suitable:** Nitrile rubber, NBR

- **As protection from splashes gloves made of the following materials are suitable:** Natural rubber, NR

- **Eye protection:** Safety glasses

- **Body protection:** Protective work clothing

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Fluid

Colour: Light blue

- **Odour:** Characteristic

- **Odour threshold:** Not determined.

- **pH-value (10 g/l) at 20 °C:** 11.0 - 11.45

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· <b>Change in condition</b> Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	Not determined.
· <b>Flash point:</b>	Not determined.
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	Not determined.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b> Lower:	Not determined.
Upper:	Not determined.
· <b>Oxidising properties</b>	No
· <b>Vapour pressure:</b>	Not determined.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b> Dynamic:	Not determined.
Kinematic:	Not determined.
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

#### · 11.1 Information on toxicological effects

##### · Acute toxicity:

##### · LD/LC50 values relevant for classification:

###### 9002-92-0 Ethoxylated lauryl alcohol

Oral | LD50 | 8600 mg/kg (Rat)

###### 1310-73-2 sodium hydroxide

Oral | LD50 | 2000 mg/kg (Rat)

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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitisation:** No sensitising effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant
- **Toxicokinetics, metabolism and distribution** No further relevant information available.
- **Acute effects (acute toxicity, irritation and corrosivity)** No further relevant information available.
- **Repeated dose toxicity** No further relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
No further relevant information available.

### SECTION 12: Ecological information

#### · 12.1 Toxicity

##### · Aquatic toxicity:

###### 64-02-8 tetrasodium ethylenediaminetetraacetate

EC50 (24h)	610 mg/L (Daphnia)
EC50 (48h)	> 100 mg/L (Daphnia)
LC50 (96h)	486 mg/L (Fish)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not determined
- **vPvB:** Not determined
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** Void

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· <b>14.2 UN proper shipping name</b>	
· <b>ADR, IMDG, IATA</b>	Void
· <b>14.3 Transport hazard class(es)</b>	
· <b>ADR, IMDG, IATA</b>	
· <b>Class</b>	Void
· <b>14.4 Packing group</b>	
· <b>ADR, IMDG, IATA</b>	Void
· <b>14.5 Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:</b>	Not applicable.
· <b>Transport/Additional information:</b>	Not dangerous according to the above specifications.
· <b>UN "Model Regulation":</b>	-

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
R22 Harmful if swallowed.  
R35 Causes severe burns.  
R38 Irritating to skin.  
R41 Risk of serious damage to eyes.

- **Abbreviations and acronyms:**

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals  
MARPOL: (from Marine Pollutant) International Convention for the Prevention of Marine Pollution from Ships  
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
UN: United Nations (also UNO: United Nations Organization)

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*NOEC: No Observed Effect Concentration**OECD: Organisation for Economic Co-operation and Development**ASTM: American Society for Testing and Materials**WAF: Water Accommodated Fraction**ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Met. Corr. 1: Corrosive to metals, Hazard Category 1**Acute Tox. 4: Acute toxicity, Hazard Category 4**Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A**Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2**Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1**Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2***\* Data compared to the previous version altered.**

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