



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

SAFETY DATA SHEET

Urnex Dezcal Descaler

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

▼ *Trade name:* Urnex Dezcal Descaler
Unique formula identifier (UFI): KH60-T04P-400E-AXWU

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

Relevant identified uses of the substance or mixture: Cleaning product
Restricted to professional users.

Uses advised against: None known.

1.3. Details of the supplier of the safety data sheet

▼ *Company and address:* **Urnex Brands, LLC**
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Gurnee, IL 60031
United States
+1 (800) 837-8140
www.urnex.com

Distributor: **Urnex Brands, LLC**
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Contact person: Customer support

E-mail: info@urnex.com

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SDS Version: 4.0

Date of previous version: 08/12/2023 (3.0)

1.4. ▼ Emergency telephone number

Infotrac +1 (352) 323-3500

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)

General public:

England - Dial 111 to reach NHS 111 (24 hour service)

Scotland - Dial 112 to reach NHS 24 (24 hour service)

Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)

See section 4 "First aid measures".

SECTION 2: HAZARDS IDENTIFICATION

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. Classification of the substance or mixture

Eye Irrit. 2; H319, Causes serious eye irritation.
STOT SE 3; H335, May cause respiratory irritation.

2.2. Label elements

Hazard pictogram(s):



Signal word:

Warning

Hazard statement(s):

Causes serious eye irritation. (H319)
May cause respiratory irritation. (H335)

Precautionary statement(s):

General:

-

Prevention:

Avoid breathing dust. (P261)
Wear eye protection. (P280)

Response:

Call a POISON CENTER/doctor if you feel unwell. (P312)
If eye irritation persists: Get medical advice/attention. (P337+P313)

Storage:

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)

Disposal:

Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances:

Citric acid

Additional labelling:

UFI: KH60-T04P-400E-AXWU

2.3. Other hazards

▼ *Additional warnings:*

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Citric acid	CAS No.: 77-92-9 EC No.: 201-069-1 UK-REACH: Index No.:	40-60%	Eye Irrit. 2, H319 STOT SE 3, H335	
sulfamic acid	CAS No.: 5329-14-6 EC No.: 226-218-8 UK-REACH: Index No.: 016-026-00-0	3-5%	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	
Aluminum sulfate	CAS No.: 10043-01-3 EC No.: 233-135-0 UK-REACH: Index No.:	1-2%	Met. Corr. 1, H290 Eye Dam. 1, H318	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation:

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact:

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact:

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If



Ingestion:

irritation continues, contact a doctor.
Continue flushing during transport.

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns:

Not applicable.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Halogenated compounds
Sulphur oxides
Nitrogen oxides (NO_x)
Carbon oxides (CO / CO₂)
Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

6.3. ▼ Methods and material for containment and cleaning up

Limit spillage, sweep up and shovel into appropriate containers for disposal. Store in suitable, closed containers for disposal.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Recommended storage material:

Keep only in original packaging.

Storage conditions:

Dry, cool and well ventilated

Incompatible materials:

Strong oxidizing agents

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Aluminum sulfate

Long term exposure limit (8 hours) (mg/m³): 2

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.

EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

Aluminum sulfate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	1.9 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	3.8 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	3.3 mg/m ³
Long term – Systemic effects - Workers	Inhalation	13.4 mg/m ³
Long term – Systemic effects - General population	Oral	1.9 mg/kg bw/day



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

sulfamic acid

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	5 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	10 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	17.4 mg/m ³
Long term – Systemic effects - Workers	Inhalation	70.5 mg/m ³
Long term – Systemic effects - General population	Oral	5 mg/kg bw/day

PNEC

sulfamic acid

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1.8 mg/L
Freshwater sediment		8.36 mg/kg
Intermittent release (freshwater)		480 µg/L
Marine water		180 µg/L
Marine water sediment		840 µg/kg
Sewage treatment plant		20 mg/L
Soil		5 mg/kg

8.2. ▼ Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations:

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios:

There are no exposure scenarios implemented for this product.

Exposure limits:

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures:

Apply standard precautions during use of the product. Avoid inhalation of gas or dust. Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and showers are clearly marked.

▼ *Hygiene measures:*

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure:

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally:

Use only UKCA marked protective equipment.

Respiratory Equipment:

Type	Class	Colour	Standards	
Respiratory protection is not needed in the event of adequate ventilation.				

Skin protection:

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	

Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Gloves	-	-	EN374	

Eye protection:

Type	Standards	
Safety glasses	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:

Solid

Colour:

White

Odour / Odour threshold:

None

pH:

-

pH in solution:

1.8 - 3 (1%)

▼ *Density (g/cm³):*

No relevant or available data due to the nature of the product.

Bulk density (kg/m³):

1 - 1.15

Kinematic viscosity:

Does not apply to solids.

▼ *Particle characteristics:*

No relevant or available data due to the nature of the product.

Phase changes



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

▼ *Melting point/Freezing point (°C):*

No relevant or available data due to the nature of the product.

Softening point/range (°C):

Does not apply to solids.

Boiling point (°C):

> 100

▼ *Vapour pressure:*

No relevant or available data due to the nature of the product.

Relative vapour density:

Does not apply to solids.

▼ *Decomposition temperature (°C):*

No relevant or available data due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C):

Does not apply to solids.

Flammability (°C):

The material is not combustible.

▼ *Auto-ignition temperature (°C):*

No relevant or available data due to the nature of the product.

Lower and upper explosion limit (% v/v):

Does not apply to solids.

Solubility

▼ *Solubility in water:*

No relevant or available data due to the nature of the product.

▼ *n-octanol/water coefficient (LogKow):*

No relevant or available data due to the nature of the product.

▼ *Solubility in fat (g/L):*

No relevant or available data due to the nature of the product.

9.2. Other information

▼ *Oxidizing properties:*

No relevant or available data due to the nature of the product.

Other physical and chemical parameters:

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong oxidizing agents

10.6. ▼ Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced



SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

Product/substance	Citric acid
Test method:	OECD 401
Species:	Mouse
Route of exposure:	Oral
Test:	LD50
Result:	5400 mg/kg bw

Product/substance	Citric acid
Test method:	OECD 401
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	11700 mg/kg bw

Product/substance	Citric acid
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kg bw

Product/substance	sulfamic acid
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	3160 mg/kg

Product/substance	sulfamic acid
Species:	Mouse
Route of exposure:	Oral
Test:	LD50
Result:	1312 mg/kg

Product/substance	Aluminum sulfate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1930 mg/kg

▼ Skin corrosion/irritation

Product/substance	Citric acid
Test method:	OECD 404
Species:	Rabbit
Result:	No adverse effect observed (Not irritating)

▼ Serious eye damage/irritation

Product/substance	Citric acid
Test method:	OECD 405



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

Species: Rabbit
Result: Adverse effect observed (Irritating)

Causes serious eye irritation.

Respiratory sensitisation

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

Skin sensitisation

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

▼ Germ cell mutagenicity

Product/substance Citric acid
Test method: OECD 471
Species: S. typhimurium
Conclusion: No adverse effect observed

Product/substance Citric acid
Test method: OECD 475
Species: Rat
Conclusion: No adverse effect observed

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

May cause respiratory irritation.

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

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Product/substance Citric acid
Test method: OECD 203
Species: Fish, Leuciscus idus
Duration: 48 hours
Test: LC50



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

Result: 440 mg/L

Product/substance Citric acid
Species: Daphnia magna
Duration: 24 hours
Test: LC50
Result: 1535 mg/L

Product/substance Citric acid
Species: Algae, Scenedesmus quadricauda
Duration: 8 days
Test: NOEC
Result: 425 mg/L

Product/substance Aluminum sulfate
Species: Fish, Carassius auratus
Duration: 96 hours
Test: LC50
Result: 100 mg/L

Product/substance Aluminum sulfate
Species: Fish, Gambusia affinis
Duration: 96 hours
Test: LC50
Result: 37 mg/L

Product/substance Aluminum sulfate
Species: Daphnia, Daphnia magna
Duration: 15 minutes
Test: EC50
Result: 136 mg/L

12.2. ▼ Persistence and degradability

Product/substance Citric acid
Result: 100%
Conclusion: Readily biodegradable
Test: OECD 301 E

12.3. ▼ Bioaccumulative potential

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

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

None known.



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 4 - Irritant (skin irritation and eye damage)

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

Not applicable.

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

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

Restrictions for application:

Restricted to professional users.

Demands for specific education:

No specific requirements.

*Control of Major Accident Hazards (COMAH) -
Categories / dangerous substances:*

Not applicable.

Additional information:

Not applicable.



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

Sources:

Regulation (EC) No 648/2004 on detergents as retained and amended in UK law.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H290, May be corrosive to metals.
H315, Causes skin irritation.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H335, May cause respiratory irritation.
H412, Harmful to aquatic life with long lasting effects.

▼ Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The safety data sheet is validated by

PurposeBuilt Brands Regulatory Team

▼ Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product.

Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en