

SECTION 1. Identification of the substance/mixture and of the company/undertaking**1.1 Product Identifier**

Product Name: DESCALE
Product Code/s: 0206-02x5
Product Use: Descaler

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

Identified uses: Descaler. Manual process.
Uses advised against: Uses other than those identified are not recommended.

1.3 Details of the supplier of the safety data sheet

Supplier Advantage Chemicals Institutional Ltd
Unit 9 Strensham Business Park,
Strensham,
Worcestershire WR8 9JZ
Tel: 01684 273299, Web: www.advchem.co.uk Email: sales@advchem.co.uk

1.4 Emergency telephone number

Emergency advice Technical Information & Safety Data Sheets - 01684 273299, Monday - Friday 8.30am - 5.00pm
Available 24/7 from our website www.advchem.co.uk

SECTION 2. Hazards identification**2.1 Classification of the substance or mixture**

The product has been classified and labelled in accordance with **Regulation (EC) No 1272/2008 [EU-GHS/CLP]**.

Classification

Physical Hazards: Not classified
Health Hazards: Skin Corr. 1B - H314
Environmental Hazards: Not classified

2.2 Label elements

Pictogram:



Signal Word: **Danger**

Hazard Statements H314 Causes severe skin burns and eye damage.

Precautionary Statements

P102	Keep out of reach of children.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
R301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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 CENTRE or doctor.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

Contains: PHOSPHORIC ACID

2.3 Other Hazards

This product does not contain any substances classified as PBT or vPvB

SECTION 3. Composition/information on ingredients

3.2 Mixtures

Ingredient	EC number	CAS number	Classification (EC) 1272/2008	Weight %
PHOSPHORIC ACID 75%	231-633-2	7664-38-2	Met. Corr.1 - H290; Skin Corr. 1B - H314	30-50%

The full text for all Hazard and Precautionary Statements are displayed in Section 16.

SECTION 4. First aid measures

4.1 Description of first aid measures

Inhalation

If spray/mist has been inhaled, proceed as follows - move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Ingestion

Do not induce vomiting. Rinse mouth thoroughly with water. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Skin contact

Remove all contaminated clothing & footwear immediately unless stuck to skin. Wash with plenty of water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact

Rinse immediately with plenty of water for 15 minutes. Remove any contact lenses and open eye lids wide apart. Transfer to hospital for specialist examination.

4.2 Most important symptoms and effects, both acute and delayed

General information

The severity of the symptoms described will vary dependant on the concentration and the length of exposure.

Inhalation

Irritation of nose, throat and airway. There may be shortness of breath, coughing or wheezing.

Ingestion

Corrosive burns in mouth and throat. Blood may be vomited. There may be bleeding from the mouth or nose.

Skin contact

Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact

Corneal burns may occur. May cause permanent damage.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate / special treatment:

Eye bathing equipment should be available on the premises.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Product is not flammable. Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2 Special hazards arising from the substance or mixture

Corrosive. In combustion emits toxic fumes.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus (SCBA) and suitable protective clothing.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Notify the police and fire brigade immediately. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of this SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2 Environmental precautions

Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and material for containment and cleaning up

Small spillages: Flush away spillage with plenty of water to clean spillage area.

Large Spillages: Contain and absorb spillage with sand, earth or other non - combustible material. Collect and place in suitable waste disposal containers and seal securely.

6.4 Reference to other sections

For personal protection see section 8.

For disposal considerations see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Usage procedures

Wear protective clothing, gloves, eye and face protection. Do not handle broken packages without protective equipment. Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions

Store in a tightly closed original container, in a dry, cool and well ventilated place.

7.3 Specific end use(s)

Specific end uses

The identified uses for this product are detailed in Section 1.2.

Usage description

See Product Information Sheet & Label for detailed use of this product.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

PHOSPHORIC ACID 75%

Short term exposure limit (15 minutes): Workplace Exposure Limit (WEL) - 2 mg/m³.

8.2 Exposure Controls

Protective Equipment



Appropriate engineering controls

Ensure there is sufficient ventilation of the area.

Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield. Ensure eye bath is to hand.

Hand protection

Wear protective impermeable gloves.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

Respiratory protection

Respiratory protection not required unless excessive product misting occurs in a confined space. Self contained breathing apparatus must be available in case of emergency.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

State	Sg	Odour	pH (conc)
Liquid.	1.20 +/- 0.5	Irritating odour.	1.0
Colour	Solubility in water		
Green.	Soluble		

9.2 Other Information

None.

SECTION 10. Stability and reactivity

10.1 Reactivity

Reactions with the following materials may generate heat: Strong acids and oxidising agents.

10.2 Chemical stability

No particular stability concerns.

10.3 Possibility of hazardous reactions

See sections 10.1, 10.4 and 10.5

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Strong acids & oxidising substances. Aluminium, Tin, Zinc and their alloys.

10.6 Hazardous decomposition products

In combustion emits toxic fumes.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

PHOSPHORIC ACID 75%	ORL	RAT	LD50	2600 mg/kg
	DERMAL	RBT	LD50	2740 mg/kg
	INH	RAT	LD50	3846 mg/kg

Relative effects for mixture

Effect	Route	Basis
Corrosivity	OPT INH DRM	Hazardous: calculated

SECTION 12. Ecological information

12.1 Toxicity

Hazardous ingredients

PHOSPHORIC ACID 75%		
Fishes 1	96H LC50	138 mg/litre
Other aquatic organisms	96H LC50	240 mg/litre

12.2 Persistence and degradability

The product is expected to be biodegradable.

12.3 Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

12.4 Mobility in soil

Readily absorbed into soil.

12.5 Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6 Other adverse effects

No known significant effects or critical hazards.

SECTION 13. Disposal considerations

13.1 Waste treatment methods

Disposal operations	Discharge used solutions to drain. Do not mix with other chemicals. Rinse out empty container with water and consign to normal waste.
Disposal of packaging	Arrange for disposal by specialist disposal company.
NB	The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14. Transport information

14.1 UN number

<u>14.1 UN number</u>	<u>14.1 UN number</u>
UN No. (ADR/RID)	1805
UN No. (IMDG)	1805
UN No. (ICAO)	1805

14.2 UN proper shipping name

Proper shipping name (ADR/RID)	PHOSPHORIC ACID SOLUTION
Proper shipping name (IMDG)	PHOSPHORIC ACID SOLUTION
Proper shipping name (ICAO)	PHOSPHORIC ACID SOLUTION
Proper shipping name (ADN)	PHOSPHORIC ACID SOLUTION

14.3 Transport hazard class(es)

ADR/RID Class	Class 8: Corrosive substances
IMDG Class	Class 8: Corrosive substances
ICAO Class/Division	Class 8: Corrosive substances

Transport Labels



14.4 Packing Group

ADR/RID Packing group	III
IMDG Packing group	III
ICAO Packing group	III

14.5 Environmental Hazards

Environmentally hazardous substance: No Marine pollutant: No

14.6 Special precautions for user

EmS-No (1), EmS No (2)	F-A, S-B
Hazard Identification No (ADR/RID)	80
Tunnel restriction code	(E)

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not relevant for a packaged product.

SECTION 15. Regulatory information

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

EU legislation

Safety Data Sheet prepared in accordance with REACH Commission Regulation (EU) No 453/2010 (which amends Regulation (EC) No 1907/2006). The product is as classified under GHS/CLP - Regulation (EC) No 1272/2008 classification, labelling & packaging of substances and mixtures.

Guidance

Workplace Exposure Limits EH40

15.2 Chemical safety assessment

No chemical safety assessment has been carried out as not applicable as this product is a mixture.

SECTION 16. Other information

Key literature references and sources for data

Miscellaneous Material Safety Data Sheets from manufacturers.
GHS/CLP - Regulation (EC) No 1272/2008 classification, labelling & packaging of substances and mixtures.
ECHA - C&L Inventory database.

Revision Comments

Revision Date 11/11/2014 (Compilation date)

Revision Issue 1 - No previous validation

SDS Status The Hazard statements listed below in this section 16 relate to the raw materials (ingredients) in the product (as listed in section 3) and NOT the finished product itself. For the Hazard Statements relating to this product see section 3.

Hazard Statements in full H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

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
AISE	= The International Association for Soaps, Detergents and Maintenance Products
Bw	= Body weight
cc	= Closed cup
CLP	= Classification, Labelling and Packaging Regulation
DNEL	= Derived no effect limit
DPD	= Dangerous preparations directive
DRM	= Dermal
dw	= Dry weight
EC50	= Median effective concentration
EUH statement	= CLP - specific hazard statement
GPG	= Guinea Pig
HAM	= Hamster
HMN	= Human
IATA	= International Air Transport Association
IBC	= Intermediate Bulk Container
IMDG	= International Maritime Dangerous Goods
IVN	= Intravenous
LC50	= Median lethal concentration
LD50	= Median lethal dose
LogPow	= logarithm of the octanol/water partition coefficient
MAM	= Mammal
MARPOL 73/78	= International Convention for the Prevention of Pollution From Ships, 1973 as modified in 1978. (Marpol - marine pollution)
MUS	= Mouse
oc	= Open cup
OCC	= Ocular/corneal
PCP	= Physico-chemical properties
PBT	= Persistent, Bioaccumulative and Toxic
PGN	= Pigeon
PNEC	= Predicted No Effect Concentration
RID	= The Regulations concerning the International Carriage of Dangerous Goods by Rail

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, express or implied, is made as to the completeness or continuing accuracy of this information. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.