

## SAFETY DATA SHEET

# Osmos Aluminium-Safe Dishwasher Detergent

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

### 1.1. Product identifier

#### Trade name

Osmos Aluminium-Safe Dishwasher Detergent

#### ▼ Product no.

OSM-ASDD-2X5, OSM-ASDD-20

#### ▼ Unique formula identifier (UFI)

XHK0-N0S8-1000-XDU8

### 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.

#### ▼ Product code (A.I.S.E.)

##### Code

AISE-P202 / Dishwash product. Automatic process.

#### ▼ Use descriptors (REACH)

Product category	Description
PC 35	Washing and Cleaning Products (including solvent based products)

#### ▼ Uses advised against

Consumer uses: Private households (= general public = consumers)

### 1.3. Details of the supplier of the safety data sheet

#### ▼ Company and address

##### Cleenol Group Ltd.

Neville House, Beaumont Road, Banbury, Oxon,

OX16 1RB

United Kingdom

Tel: +44(0) 1295 251 721

www.cleenol.com

#### ▼ E-mail

technical.enquiries@cleenol.co.uk

#### Revision

21/09/2023

#### SDS Version

1.0

#### Date of previous version

26/07/2022 (1.0)

### 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h 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

Skin Corr. 1B; H314, Causes severe skin burns and eye damage.

Eye Dam. 1; H318, Causes serious eye damage.

### 2.2. Label elements

Hazard pictogram(s)

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According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878



## Signal word

Danger

## Hazard statement(s)

Causes severe skin burns and eye damage. (H314)

## Precautionary statement(s)

### General

-

### Prevention

Do not breathe vapour/mist. (P260)

Wear eye protection/protective gloves/protective clothing. (P280)

### ▼ Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. (P301+P330+P331)

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. (P303+P361+P353)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

Wash contaminated clothing before reuse. (P363)

### Storage

-

### ▼ Disposal

-

### ▼ Hazardous substances

Sodium Metasilicate

### ▼ Additional labelling

UFI: XHK0-N0S8-1000-XDU8

## 2.3. Other hazards

### ▼ Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

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) 2018/605.

## SECTION 3: Composition/information on ingredients

### 3.1. ▼ Substances

Not applicable. This product is a mixture.

### 3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
(1-hydroxyethylidene)bisphosphonic acid, sodium salt	CAS No.: 29329-71-3 EC No.: 249-559-4 UK-REACH: Index No.:	10-30%	Acute Tox. 4, H302 Eye Irrit. 2, H319	
Sodium Metasilicate	CAS No.: 10213-79-3 EC No.: 229-912-9 UK-REACH: Index No.:	5-10%	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335	

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

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment.

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

##### ▼ Eye contact

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

##### ▼ Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

##### ▼ Burns

Not applicable.

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

IF exposed or concerned:

Get immediate 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.

#### 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

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

### 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

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.  
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

Avoid direct contact with the product.  
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

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

#### Recommended storage material

Keep only in original packaging.

#### ▼ Storage temperature

Dry, cool and well ventilated  
0 - 40°C

#### Incompatible materials

Strong acids

### 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

Sodium hydroxide  
Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 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

Sodium hydroxide

Duration:	Route of exposure:	DNEL:
Long term - Local effects - Workers	Inhalation	1 mg/m <sup>3</sup>

#### ▼ PNEC

No data available.

### 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

The formation of vapours 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 eyewash and emergency showers are clearly marked.

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Ensure that eyewash stations and safety showers are located within easy reach.  
Apply standard precautions during use of the product. Avoid inhalation of vapours.

## 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. Always wash hands, forearms and face.

## Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

## Individual protection measures, such as personal protective equipment

### Generally


Use only UKCA marked protective equipment.

### ▼ Respiratory Equipment

Type	Class	Colour	Standards
No special when used as intended.			


### Skin protection

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




### Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388



### Eye protection

Type	Standards
Safety glasses with side shields.	EN166



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Physical state

Liquid

#### Colour

Yellowish

#### ▼ Odour / Odour threshold

Characteristic

#### pH

12.5 - 13.5

#### ▼ Density (g/cm<sup>3</sup>)

-

#### Relative density

1.19 (20 °C)

#### ▼ Kinematic viscosity

Testing not relevant or not possible due to the nature of the product.

#### Particle characteristics

Does not apply to liquids.

#### Phase changes

#### ▼ Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

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## Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

## Boiling point (°C)

100

### ▼ Vapour pressure

Testing not relevant or not possible due to the nature of the product.

### ▼ Relative vapour density

Testing not relevant or not possible due to the nature of the product.

### ▼ Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

## Data on fire and explosion hazards

### ▼ Flash point (°C)

Testing not relevant or not possible due to the nature of the product.

### ▼ Flammability (°C)

Testing not relevant or not possible due to the nature of the product.

### ▼ Auto-ignition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

### ▼ Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

## Solubility

### Solubility in water

Completely soluble

### ▼ n-octanol/water coefficient

Testing not relevant or not possible due to the nature of the product.

### ▼ Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

## 9.2. Other information

### ▼ Other physical and chemical parameters

No data available.

### ▼ Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

## 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

Extremes of temperature

Storage in the open is not recommended.

### 10.5. Incompatible materials

Strong acids

### 10.6. ▼ Hazardous decomposition products

Thermal decomposition may produce corrosive vapours.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### ▼ Acute toxicity

Product/substance	(1-hydroxyethylidene)bisphosphonic acid, sodium salt
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1100 mg/kg

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

#### Skin corrosion/irritation

Causes severe skin burns and eye damage.

#### Serious eye damage/irritation

Causes serious eye damage.

#### 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

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

#### 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

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.

### 11.2. Information on other hazards

#### ▼ Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

#### ▼ Endocrine disrupting properties

Not applicable.

#### ▼ Other information

None known.

## SECTION 12: Ecological information

### 12.1. ▼ Toxicity

No data available.

### 12.2. ▼ Persistence and degradability

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

### 12.3. ▼ Bioaccumulative potential

No data available.

### 12.4. ▼ Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

### 12.6. ▼ Endocrine disrupting properties

Not applicable.

### 12.7. ▼ Other adverse effects

None known.

## SECTION 13: Disposal considerations

### 13.1. ▼ Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 8 – Corrosive

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.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878




▼ EWC code

Not applicable.

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 information:
ADR	UN1760	CORROSIVE LIQUID, N.O.S. (Sodium Metasilicate, Sodium hydroxide)	Transport hazard class: 8 Label: 8 Classification code: C9 	III	No	Limited quantities: 5 L Tunnel restriction code: (E) See below for additional information.
IMDG	UN1760	CORROSIVE LIQUID, N.O.S. (Sodium Metasilicate, Sodium hydroxide)	Transport hazard class: 8 Label: 8 Classification code: C9 	III	No	Limited quantities: 5 L EmS: F-A S-B See below for additional information.
IATA	UN1760	CORROSIVE LIQUID, N.O.S. (Sodium Metasilicate, Sodium hydroxide)	Transport hazard class: 8 Label: 8 Classification code: C9 	III	No	See below for additional information.

\* Packing group

\*\* Environmental hazards

▼ Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

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.

People under the age of 18 shall not be exposed to this product.

▼ Demands for specific education

No specific requirements.

▼ SEVESO - Categories / dangerous substances

Not applicable.

▼ Additional information



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Not applicable.

▼ Sources

The Management of Health and Safety at Work Regulations 1999.

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.

H302, Harmful if swallowed.

H314, Causes severe skin burns and eye damage.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H335, May cause respiratory irritation.

▼ The full text of identified uses as mentioned in section 1

PC 35 = Washing and Cleaning Products (including solvent based products)

▼ 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

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

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

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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](#)  
Regulatory Chemist

## Other

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