

SAFETY DATA SHEET

Odin Cons

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

1.1. Product identifier

Trade name: Odin Cons

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

Relevant identified uses of the substance or mixture: Cleaning product, Cleaning of oxides (rust), salts, lime, algae etc. in pipe systems or vessels. Restricted to professional users.

Uses advised against: Corrodes galvanized and zinc metallized metal and surfaces treated with zincethylsilicate.

1.3. Details of the supplier of the safety data sheet

Company and address: **Nordic Green Products AS**
Idrettsvegen 113B
5353 STRAUME
Norway
+47 56126100
www.ngproducts.no

E-mail: post@ngproducts.no

Revision: 31/01/2024

SDS Version: 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. 1; H314, Causes severe skin burns and eye damage.

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

2.2. Label elements

Hazard pictogram(s):



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 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)
Immediately call a POISON CENTER/doctor. (P310)

Storage: -

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

Hazardous substances: phosphoric acid ... %, orthophosphoric acid ... %

Additional labelling: Not applicable.

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) 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
citric acid	CAS No.: 5949-29-1 EC No.: 611-842-9 UK-REACH: Index No.:	< - 30 %	Eye Irrit. 2, H319	
phosphoric acid ... %, orthophosphoric acid ... %	CAS No.: 7664-38-2 EC No.: 231-633-2 UK-REACH: Index No.: 015-011-00-6	< 5 %	Skin Corr. 1B, H314 (SCL: 25.00 %) Skin Irrit. 2, H315 (SCL: 10.00 %) Eye Irrit. 2, H319 (SCL: 10.00 %)	[1]

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

Other information

[1] European occupational exposure limit.
Specific Concentration Limit CAS No 7664-38-2:
Eye Irrit. 2; : 10 % ≤ C < 25 %
Skin Corr. 1B; : C ≥ 25 %
Skin Irrit. 2; : 10 % ≤ C < 25 %

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

Hazardous combustion products: Phosphorus oxides (POx)

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.
 Hazchem Code: 2X

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.

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 and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

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: Always store in containers of the same material as the original container.

Storage temperature: Dry, cool and well ventilated
 Protect from sunlight.
 Storage at temperatures above 20°C will reduce the storage time.

Incompatible materials: Alkalis
 Bases

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

phosphoric acid ... %, orthophosphoric acid ... %
 Long term exposure limit (8 hours) (mg/m³): 1
 Short term exposure limit (15 minutes) (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

phosphoric acid ... %, orthophosphoric acid ... %

Duration:	Route of exposure:	DNEL:
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Long term – Local effects - General population	Inhalation	360 µg/m ³
Long term – Local effects - Workers	Inhalation	1 mg/m ³
Long term – Systemic effects - General population	Inhalation	4.57 mg/m ³
Long term – Systemic effects - Workers	Inhalation	10.7 mg/m ³
Short term – Local effects - Workers	Inhalation	2 mg/m ³
Long term – Systemic effects - General population	Oral	100 µg/kgbw/day

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. 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. Pay special attention to 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: Wash contaminated clothing before reuse.
Use only UKCA marked protective equipment.



Respiratory Equipment:

Work situation	Type	Class	Colour	Standards	
In case of inadequate ventilation	E	Class 2 (medium capacity)	Yellow	EN14387	


Skin protection:

Recommended	Type/Category	Standards	
Alkali resistant protective clothing			

Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Latex	0.43	480	EN374-2, EN388	
Vinyl/PVC	0,45	480	EN374-2, 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:	Pink
Odour / Odour threshold:	Faint
pH:	<2
Density (g/cm ³):	1141.96 (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):	< -2 °C
Softening point/range (waxes and pastes) (°C):	Does not apply to liquids.
Boiling point (°C):	Testing not relevant or not possible due to the nature of the product.
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):	The material is not combustible.
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 (LogKow):	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

Oxidizing properties:	Testing not relevant or not possible 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 materialsAlkalis
Bases**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 as retained and amended in UK law****Acute toxicity**

Product/substance	citric acid
Species:	Mouse
Route of exposure:	Oral
Test:	LD50

Result: 5040 mg/kg

Product/substance	phosphoric acid ... %, orthophosphoric acid ... %
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	2740 mg/kg

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

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
Species:	Fish, <i>Leuciscus idus</i>
Test:	LC50
Result:	760 mg/L

Product/substance	phosphoric acid ... %, orthophosphoric acid ... %
Species:	Fish, <i>Gambusia affinis</i>
Duration:	96 hours
Test:	LC50
Result:	138 mg/L

12.2. Persistence and degradability

Product/substance	citric acid
Duration:	28 days
Result:	>70 %
Conclusion:	-
Test:	OECD 301 D

12.3. Bioaccumulative potential

No bioaccumulation expected.

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.

SECTION 13: DISPOSAL CONSIDERATIONS

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.

EWC code




12 03 01* Aqueous washing liquids

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 information:
ADR	UN3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	Transport hazard class: 8 Label: 8 Classification code: C1 	II	No	Limited quantities: 1 L Tunnel restriction code: (E) See below for additional information.
IMDG	UN3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	Transport hazard class: 8 Label: 8 Classification code: C1 	II	No	Limited quantities: 1 L EmS: F-A S-B See below for additional information.
IATA	UN3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	Transport hazard class: 8 Label: 8 Classification code: C1 	II	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.

Hazchem Code: 2X

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:	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**

H314, Causes severe skin burns and eye damage.
H315, Causes skin irritation.
H319, Causes serious eye irritation.

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

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 classification of the substance/mixture in regard of skin corrosion and serious eye damage is based on the pH-criterion given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The safety data sheet is validated by

EcoOnline Regulatory Affairs

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