

# Safety Data Sheet

according to Regulation (EC) No 1907/2006



## ECO PLUS

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

#### 1.1 Product identifier

ECO PLUS

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

##### Use of the substance/mixture

Liquid cleaner for machine cleaning of dishes and kitchen utensils in the food industry and gastronomy.

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

Company name: Arcora International GmbH  
Street: Marsstraße 9  
Place: 85609 Aschheim by Munich  
Germany  
Tel: +49 (0)89 / 14 33 29 3-0  
Fax: +49 (0)89 / 14 33 29 3-29  
E-Mail: info@arcora.de

#### 1.4 Emergency telephone number + 49 (0) 89 / 14 33 29 3-10

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation : Eye Dam. 1

Hazard statements:

Causes severe skin burns and eye damage. Very toxic to aquatic organisms.

#### 2.2 Label elements

Hazard components for labelling:

Sodium hydroxide

Potassium hydroxide

Sodium hypochlorite

Signal word: Danger

Pictograms: GHS05

GHS09



#### Hazard statements

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic organisms.



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## Precautionary statements

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

### Additional advice on labelling

Classification according to Regulation (EC) No 1272/2008 [CLP]

## 2.3 Other hazards

Hazardous reactions:  
Not miscible with acid, high alkalinity. Danger for development of toxic fumes (chlorine).

### SECTION 3: Composition/information on ingredients

### 3.1 Mixtures

## Chemical characterization

alkalic, chlorine-free glass cleaner

## Hazardous components

EG-No.	Chemical name	Quantity
CAS-No.		
Index-No.	Classification according to Regulation (EG) No. 1272/2008 CLP]	
REACH-No.		
215-185-5	Potassium hydroxide	1 - < 5 %
1310-73-2		
	Met. Corr. 1, Skin Corr. 1A; H290 H314	
01-2119457892-27		
215-181-3		1 - < 5 %
1310-58-3		
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1A; H290 H302 H314	
01-2119487136-33		
231-668-3	Sodium hypochlorite	1 - < 5 %
7681-52-9		
	Met. Corr. 1, Skin Corr. 1B, Aquatic Acute 1 (M-Factor = 100), Aquatic Chronic 2; H290 H314 H400 H411 EUH031	
01-2119488154-34		

Full text of H and EUH statements: see section 16.

## Further information

Note: The danger characteristics and R-Phrases refer to the properties of the neat substances.



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## SECTION 4: First aid measures

#### 4.1 Description of first aid measures

## General information

Remove contaminated, saturated clothing immediately. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

### After inhalation

In case of inhaling spray mist, consult a physician. Provide fresh air.

### After skin contact

After contact with skin, wash immediately with plenty of water and soap. Do not wash off with acidic cleaning agents. In case of skin irritation, consult a physician.

### After eye contact

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

## After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Seek medical attention if problems persist.

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

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

Symptomatic treatment and supportive therapy are recommended. Gastric lavage is not recommended.

## SECTION 5: Firefighting measures

## 5.1 Extinguishing media

### Suitable extinguishing media

The product itself does not burn. In case of fire, use fire extinguisher class D. Water, foam, carbon dioxide (CO2).

## Unsuitable extinguishing media

High power water jet.

## 5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>). Chlorine (Cl<sub>2</sub>). Hydrogen chloride (HCl)

### 5.3 Advice for firefighters

Use appropriate respiratory protection. In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions. See protective measures under point 7 and 8.

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### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

### 6.3 Methods and material for containment and cleaning up

Take up mechanically. Suitable material for taking up:  
Universal binding agent. Treat the recovered material as prescribed in the section on waste disposal. Wash with plenty of water.

### 6.4 Reference to other sections

High risk of slipping due to leakage/spillage of product.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

Avoid contact with skin and eyes. Do not breathe gas/fumes/vapour/spray. When using do not eat, drink or smoke. Warning! Do not use together with other products. May release dangerous gases (chlorine).

#### Advice on protection against fire and explosion

No special measures are necessary.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.  
Protect against:  
UV-radiation/sunlight  
Frost  
Unsuitable materials for Container: metal

#### Advice on storage compatibility

Do not store together with:  
Reducing agents  
Zinc  
Iron  
Amines  
Aluminium  
Acid  
Oxidizing agent

#### Further information on storage conditions

Keep only in the original container.  
Recommended storage temperature: 5-30°C  
Storage class TRGS 510: 8 non flammable corrosive substances (liquid).

### 7.3 Specific end use(s)

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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Additional advice on limit values

See section 7. Additional information about structure of technical plants: Avoid leakages in dosage systems

#### 8.2 Exposure controls

##### Appropriate engineering controls

No special measures are necessary.

##### Protective and hygiene measures

No special measures are necessary.

##### Eye/face protection

Tightly sealed safety glasses.

##### Hand protection

Wear suitable gloves.  
Penetration time (maximum wearing period): 8 h  
Suitable material:  
NR (Natural rubber (Caoutchouc), Natural latex). 0,5 mm  
CR (polychloroprenes, Chloroprene rubber). 0,5 mm  
NBR (Nitrile rubber). 0,35 mm  
FKM (fluororubber). 0,4 mm  
PVC (Polyvinyl chloride). 0,5 mm  
Before using check leak tightness / impermeability.

##### Body/Skin protection

Protective apron.

##### Respiratory protection

Respiratory protection necessary at:  
Aerosol or mist generation.  
Insufficient ventilation.  
Handling larger quantities.  
Suitable respiratory protective equipment:  
Combination filter device (DIN EN 141).. A B E 1

##### Environmental exposure controls

No special measures are necessary.

### SECTION 9: Physical and chemical properties

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

Physical state: liquid  
Colour: colourless  
Odour: odourless

pH-value (1 %): > 13

Testmethod

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### Changes in the physical state

Initial boiling point and boiling range: 99,97 °C  
Vapour pressure (at 20 °C): 23,37 hPa  
Vapour pressure (at 50 °C): 123,3 hPa  
Density: 1,2 g/cm<sup>3</sup>  
Water solubility: unlimited

### 9.2. Other information

Not applicable

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product is stable under storage at normal ambient temperatures.

### 10.2 Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

### 10.3 Possibility of hazardous reactions

Exothermic reaction with: acid

### 10.4 Conditions to avoid

Do not allow contact to acid, product may release gas (Cl<sub>2</sub>)

### 10.5 Incompatible materials

Reducing agents.  
Zinc.  
Iron.  
Amines.  
Aluminium.  
Acid.

### Further information

Exothermic reaction with acid.

### 10.6 Hazardous decomposition products

In case of warming: Decomposition under formation of: chlorine.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

CAS-No.	Chemical name				
	Route of exposure	Method	Dose	Species	Source
1310-73-2	Sodium hydroxide; caustic soda				

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	oral	LD50	2000 mg/kg	Rat	
1310-58-3	caustic potash, potassium hydroxide				
	oral	LD50	365 mg/kg	Rat	
7681-52-9	Sodium hypochlorite				
	oral	LD50	1100 mg/kg	Rat	
	dermal	LD50	> 10000 mg/kg	Rabbit	
	inhalative (1 h) vapour	LD50	10,5 mg/l	Rat	

Causes severe skin burns and eye damage.

None known.

None known.

None known.

### Observations relevant to classification

Diluted solutions may have a weaker effect, depending on the concentration.

## SECTION 12: Ecological information

## 12.1 Toxicity

Technically correct releases of minimal concentrations to adapted biological sewage treatment facility, will not disturb the biodegradability of activated sludge. due to the alkaline character of the product, usually, it has to be neutralized before contaminated effluents are introduced into the waste water treatment system.

CAS-No.	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
1310-73-2	Sodium hydroxide; caustic soda					
	Acute fish toxicity	LC50	45,4 mg/l	96 h	Oncorhynchus mykiss	
	Acute crustacea toxicity	EC50	> 100 mg/l	48 h	Daphnia magna	
7681-52-9	Sodium hypochlorite					
	Acute fish toxicity	LC50	0,01-0,1 mg/l	96 h		
	Fish toxicity	NOEC	0,04 mg/l	28 d		
	Algae toxicity	NOEC	0,0021 mg/l	7 d		
	Crustacea toxicity	NOEC	0,007 mg/l	15 d		

## 12.2 Persistence and degradability

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

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No indication of bioaccumulation potential.

CAS-No.	Chemical name	Log Pow
1310-73-2	Sodium hydroxide; caustic soda	-3,88

No information available.

This mixture does not contain any substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC or Regulation (EC) No 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List.

No information available.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Dispose of waste according to applicable legislation. Hand over to officially registered waste disposal company.

070699	WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified
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070103	WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; organic halogenated solvents, washing liquids and mother liquors Classified as hazardous waste.
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Completely emptied packings can be re-cycled.

## UN 1719

## CAUSTIC ALKALI LIQUID, N.O.S.



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### 14.3 The transport hazard class

8

### 14.4 Packing group

III

Hazard label:

8



Classification code: C5  
Special provisions: 274  
Limited quantity: 5 L  
Excepted quantity: E1  
Transport category: 3  
Hazard number: 80  
Tunnel restriction code: E

### Other relevant information about land transport

lapse

### River transport (ADN)

14.1 UN-number UN 1719

### 14.2 UN proper shipping name

CAUSTIC ALKALI LIQUID, N.O.S.

### 14.3 The transport hazard class

8

### 14.4 Packing group

III

Hazard label:

8



Classification code: C5  
Special provisions: 274  
Limited quantity: 5 L  
Excepted quantity: E1

### Other relevant information about river transport

lapse

### Sea transport (IMDG)

14.1 UN-number UN 1719

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### 14.2 UN proper shipping name

CAUSTIC ALKALI LIQUID, N.O.S.

### 14.3 The transport hazard class

8

### 14.4 Packing group

III

Hazard label:

8



Special provisions: 223, 274  
Limited quantity: 5 L  
Excepted quantity: E1  
EmS: F-A, S-B

### Other relevant information about sea transport

lapse

### Air transport (ICAO)

14.1 UN-number UN 1719

### 14.2 UN proper shipping name

CAUSTIC ALKALI LIQUID, N.O.S.

### 14.3 The transport hazard class

8

### 14.4 Packing group

III

Hazard label:

8



Special provisions: A3 A803  
Limited quantity Passenger: 1 L  
Passenger LQ: Y841  
Excepted quantity: E1

IATA- packing instructions - Passenger: 852  
IATA- max. quantity - Passenger: 5 L  
IATA- packing instructions - Cargo: 856  
IATA- max. quantity - Cargo: 60 L

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### Other relevant information about air transport

lapse

### 14.5 Special precautions for user

Information not provided.

### 14.6 environmental hazards

endangering the environment: no

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

Not applicable.

## SECTION 15: Regulatory information

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

#### National regulatory information

Water contaminating class (D): 1 – slightly water contaminating  
Status: Mixture rules VwVwS regulation 4, Nr. 3

## SECTION 16: Other information

### Abbreviations and acronyms

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 Harmonized 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  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%

Process categories according to ECHA guidance on information requirements and chemical safety assessment, chapter R.12:

PROC 1: Use in closed processes.

PROC 8 (Transfer): Dilution of concentrated products, application of drain cleaners, dosage of textile washing agents.

PROC 10 (Roller application or brushing): Processing without large-scale spraying.

PROC 11 (Spraying outside industrial settings): Processing with large-scale spraying (e. g. high pressure cleaning, foam gun).

PROC 19 (Hand-mixing with intimate contact): Hand cleaning and disinfection.

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H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
EUH031	Contact with acids liberates toxic gas.

The above information describes exclusively the safety requirements of the product and is based on our present -day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.