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

1.1 Product identifier

ECO GLS

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

Use of the substance/mixture

liquid machine rinse for glass rinsing machines

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.

2.2 Label elements

Hazard components for labelling:
caustic potash, potassium hydroxide
Signal word: Danger
Pic0tograms: GHS05

Hazard statements

H314 Causes severe skin burns and eye damage.

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

None known.

SECTION 3: Composition/information on ingredients

3.1 Mixtures

Chemical characterization

alcalic, chlorine-free glass cleaner

Hazardous components

EG-No.	Chemical name	Anteil
CAS-No.		
Index-No.	Classification according to Regulation (EG) No. 1272/2008 CLP]	
REACH-No.		
215-181-3	Potassium hydroxide	5 - < 10 %
1310-58-3		
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1A; H290 H302 H314	
01-2119487136-33		

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.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

The product itself does not burn. In case of fire: Use powder- foam- or CO2-fire extinguisher to extinguish. Water vapour

Unsuitable extinguishing media

Water only in case of small fires.

5.2 Special hazards arising from the substance or mixture

Im Brandfall können entstehen: Kohlendioxid (CO2).Kohlenmonoxid.

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.

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.

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

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Protective and hygiene measures

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

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

		Testmethod
pH-value (1 %):	11,9	

Changes in the physical state

Melting point:	1 °C
Initial boiling point and boiling range:	100 °C
Vapour pressure (at 20 °C):	23,37 hPa
Vapour pressure (at 50 °C):	123,3 hPa
Density:	1,35 g/cm³
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

Frost, Head

10.4 Conditions to avoid

Do not allow contact to acid, product may release gas (Cl2)

10.5 Incompatible materials

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

Further information

Exothermic reaction with acid.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

CAS-No.	Chemical name				
	Route of exposure	Method	Dose	Species	Source
1310-58-3	Potassium hydroxide				
	oral	LD50	365 mg/kg	Rat	

Irritation and corrosivity

After ingestion: Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
After skin contact: corrosive.
Irritation on the eye: Danger of severe eye damage.

Sensitising effects

None known.

Severe effects after repeated or prolonged exposure

None known.

Carcinogenic, mutagenic and toxic effects

None known.

SECTION 12: Ecological information

12.1 Toxicity

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.

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

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.

12.6 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Advice on disposal

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

Waste disposal number of waste from residues/unused products

060204 Sodium and potassium hydroxide

Contaminated packaging

Completely emptied packings can be re-cycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1 UN-number UN 1814

14.2 UN proper shipping name

POTASSIUM HYDROXIDE SOLUTION

14.3 The transport hazard class

8

14.4 Packing group

III

Hazard label: 8

Classification code: C5
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard number: 30
Tunnel restriction code: E

Other relevant information about land transport

lapse

River transport (ADN)

14.1 UN-number UN 1814

14.2 UN proper shipping name

POTASSIUM HYDROXIDE SOLUTION

14.3 The transport hazard class

8

14.4 Packing group

III

Hazard label: 8

Classification code: C5
Limited quantity: 5 L
Excepted quantity: E1

Other relevant information about river transport

lapse

Sea transport (IMDG)

14.1 UN-number UN 1814

14.2 UN proper shipping name

POTASSIUM HYDROXIDE SOLUTION

14.3 The transport hazard class

8

14.4 Packing group

III

Hazard label: 8

Special provisions: 223
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 1814

14.2 UN proper shipping name

POTASSIUM HYDROXIDE SOLUTION

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

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.

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severve skin burns and eye damage.

Further information

The above information describes exclusively the safety requirements of the product and is based

on our present -day knowledge. The information is intendend to give you advice about the safe handling oft he 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 fort he new made-up material.