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

1.1 Product identifier

CHLORADO

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

Using of substance and mixture

Highly concentrated kitchen basic cleaner with active chlorine

Uses advised against

Not suitable for alkali-sensitive materials. Contact with acids liberates toxic gas. Contact with strong acids leads to violent reaction with evolution of heat.

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 under CLP (EG) Nr. 1272/2008 [CLP]

Hazard categories:
Skin corrosion/irritation: Skin Corr. 1A
Serious eye damage/eye irritation: Eye Dam. 1
Hazard statement:
Causes severe skin burns and eye damage.
Causes serious eye damage.

2.2 Label elements

Signal word:	Danger
Pictograms:	GHS05

Hazard statements

H290	Causes severe skin burns and eye damage.
H314	Causes serious eye damage.

EUH206 Warnig! Do not use together with other products. May release dangerous gases (chlorine).

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): 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.

2.3 Other hazards

This substance is not identified as a PBT substance.

SECTION 3: Composition/information on ingredients

3.1 Mixtures

Hazardous ingredients

EG-No.	Chemical name	Quantity
CAS-No.		
Index-No.	Classification according to information (EG) Nr. 1272/2008 CLP]	
REACH-No.		
215-181-3	Caustic potash (45%)	5 - 15 %
26288-25-5		
019-002-00-8	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1A	
231-668-3	Sodium hypochlorite 12 % with active chlorine	5 - 15 %
7681-52-9		
017-011-00-1	Met. Corr. 1, Skin Corr. 1B, STOT SE 3, Aquatic Acute 1	
263-016-9	Nonionic detergent 28 %	< 5 %
61788-90-7		
	Skin Irrit 2 H315, Eye Irrit 2 H319	

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

Labelling for contents according to Regulation (EC) No 648/2004

5 % - 15 % bleaching agent on chlorine, < 5 % nonionic detergent, < 5% phosphonate.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove any clothing that has been contaminated with the product immediately.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After skin contact

Immediately remove any contaminated clothing, shoes or stockings. After contact with skin, wash immediately with plenty of water and soap. Do not wash with: solvents/thinner.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable, delayed onset of symptoms and effects may be found in section 11 or at the recording routes in section 4.1.

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

No relevant data availalble.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray
Alcohol-resistant foam
Carbon dioxide
Extinguishing powder

5.2 Special hazards arising from the substance or mixture

Exposure risk

Hazardous combustion products: Conflagration gases from organic materials are always rated toxic for breathing.

5.3 Advice for firefighters

Special protective equipment

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Fire fighting water forms corrosive alkaline solutions - slip hazard! Fire fighting water forms corrosive acid solutions.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition - No smoking. Ventilate affected area.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Safe handling: see section 7
Personal protection equipment: see section 8

6.2 Environmental measures

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Prevent spread over a wide area (e.g. by containment or oil barriers). Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal. Disposal: see section 13. Clean with detergents. Avoid solvent cleaners.

6.4 Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

When using do not eat, drink, smoke or sniff. Avoid contact with skin, eyes and clothes. Thorough skin-cleansing after handling the product. Do not breathe gas/fumes/vapour/spray. Wear personal protection equipment (refer to section 8). In the immediate working surroundings there must be: Provide eye shower and label its location conspicuously. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Store only in original container and keep locked up. Please note legal specifications for water!

Suitable packaging: No special requirements.

Advice on storage compatibility:

Store only in original container and keep locked up.

Storage class in TRGS 510: 8B
(Non-combustible corrosive hazardous substances)

Further information on storage conditions

Keep container tightly closed and in a well-ventilated place. Protect against frost.

7.3 Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Protective and hygiene measures

The general hygienic measures in dealing with chemicals has to be applied. Wash hands and face after working with substance. Keep away from food, drink and animal feedingstuffs.

Eye/face protection

Suitable eye protection: Dust protection eye glasses/Face protection shield DIN EN 166

Hand protection

Wear suitable gloves. Replace when worn. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. See information supplied by the manufacturer.

Suitable material: EN 374
Breakthrough time (maximum wearing time): > 30 min.Use protective skin cream before handling the product.

Penetration time of glove material:
Permeation time / breakthrough time: ≥ 8 hours (DIN EN 374). The exact break-through time must be found out and adhered to by the manufacturer of the protective gloves. Protective gloves should be replaced at first signs of wear.

Not suitable are gloves made of the following materials:

Leather gloves, rough cloth gloves

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values. Use suitable breathing apparatus.

Body protection

Protective clothing (e.g. safety shoes EN ISO 20345, long-sleeved working clothes)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	yellowish green
Odour:	by chlorine

		Test method
pH-value (at 20 °C):	14	
Boiling point:	~ 100 °C	

Explosive properties

inexplosive

Relative density:	~ 1,210 g/ml
Water solubility:	soluble

9.2 Further information

Solid content:	not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions

Exothermic reaction with: oxidising agent, strong acid, strong alkali

10.4 Conditions to avoid

See section 7. Protect against frost.

10.5 Incompatbile materials

Not suitable for acid sensitive materials.

10.6 Hazardous decomposition products

Hazardous products of decomposition are not known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicokinetics, metabolism and distribution

If necessary, further information on adverse health effects see section 2.1 (classification) The classification was made according to the calculation method according to CLP / GHS.

Acute toxicity

CAS-No.	Chemical name				
	Route of exposure	Method	Dose	Species	Source
	caustic potash (45 %)				
	oral	LD50	500 mg/kg		ATE
	ATE (mix)				
	oral	ATE (mix)	4215 mg/kg		

Symptoms / absorption route

Corrosive/irritant to skin:

Relevant ingredients:
Caustic potash (45 %),
5% -15 %, additive,
Classification of the substance: Category 1A
SCL: Category 1A: 5 %
Category 1B: 2 %
Category 1C: 2 %
Category 2: 0,5 %

Sodium hypochlorite, 5 - 15 %, additive,
Classification of the substance: Category 1B
SCL: Category 1B: 5 % (general limit)
Category 1C: 5 % (general limit)
Category 2: 10 % (general limit)

Nonionic detergent < 5% additive
Classification of the substance: Category 2
SCL: Category 2: 10% (general limit)

Result: The mixture is classified in category 1A.

Caustic-/irritant effect with the eyes:

Category 1A corrosive substances also cause severe eye damage.

Sensitization of the respiratory tract /skin

Not classified.

Specific target organ-toxicity (single exposure)

Relevant ingredients:
Sodium hypochlorite, 5 - 15 %,
Classification of the substance: Category 3
SCL: Category 3: 20 % (general limit)

Result: The mixture is not classified in this hazard category.

CMR-effect (carcinogenic, mutagenic and teratogenic effect)

Carcinogenicity: not classified
Mutagenicity: not classified
Teratogenicity: not classfied

11.2 Further information

The classification was made in accordance with the calculation method of Regulation (EC) No 1272/2008.

SECTION 12: Ecological information

12.1 Toxicity

Water contamination

Ecological data are not available.
Ingredients that can contribute to acute aquatic hazard:

CAS-No.	Chemical name					
	Aquatic toxicity	Method	Dose	[h] | [d]	Species	Source
7681-52-9	Sodium hypochlorite					
		LC50	0,22-0,62 mg/l	96 h	Pimephales promelas	OECD 203
		EC50	2,1 mg/l	96 h	Daphnia magna	OECD 201
		EC50	28 mg/l	24 h	Desmodesmus subspicatus (green alga)	

M-factor (aquatic tox.): 1

The mixture is not classified in this hazard category.

12.2 Persistence and degradability

Biologic degradability

	inoculum	parameter	Degree of degradation	Method	Comment
Mixture			> 90 %	OECD 301A (95 % 21d mod. OECDScreening-Test)	Easily biodegradable

12.3 Bioaccumulative potential

Mixture: no data available.

12.4 Mobility in soil

Dissolved in water.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Advice on disposal

The product must be disposed of in compliance with official regulations.

Waste disposal number of used product

070699 Waste - not otherwise specified

200129 Detergents containing dangerous substances

The waste code numbers mentioned are recommendations based on the probable use of the product. The particular application and local disposal situation obtaining for the user may lead to other waste codes being assigned as well.

Disposal of uncleaned packings and recommended cleaning detergent

Comply with the regional authorities. Packages that cannot be cleaned have to be disposed like the product.

Note

The user is cautioned that additional supplemental local or national regulations may exist for disposal.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1 UN-number UN 1719

14.2 UN proper shipping name

Caustic alkali, liquid, n.o.s. Potassium hydroxide solution

14.3 Transport hazard class(es)

8

14.4 Packing group

II

Hazard label: 8

Special regulations: 274 601
Limited quantity: 1 L
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. Potassium hydroxide solution

14.3 The transport hazard class

8

14.4 Packing group

II

Hazard label: 8

other relevant information about river transport

lapse

Sea transport (IMDG)

14.1 UN-number UN 1719

14.2 UN proper shipping name

Caustic alkali liquid fluid n.o.s Potassium hydroxide solution

14.3 The transport hazard class

8

14.4 Packing group

II

Hazard label: 8

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 fluid n.o.s Potassium hydroxide solution

14.3 The transport hazard class

8

14.4 Packing group

II

Hazard label: 8

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 regulations

Water contaminating class (D): Not classified.

Additional guidance

Classification and labelling see section 2.
Chemicals Ordinance, ChemV note.
Risk Reduction related to Chemical Products.
Air Quality Control Regulation.

National provisions

Accidents ordinance: Observe the Ordinance on Protection against Incidents (Major Accident Ordinance, MAO).

Water hazard class: 2 – water contaminating

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

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 severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
EUH210	Safety data sheet available on request.

Further information

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.