Detergent C11

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

1.1. Product identifier

Commercial name: DETERGENT C11
Commercial code: **0S2092 - 0S2281**

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

Detergent for the automatic washing of dishes

Sector of use:
Professional use[SU22]

Non-recommended uses
Do not use for any purpose other than those indicated.

1.3. Details of the supplier of the safety data sheet

Distributed by:
Electrolux Professional S.p.A.
Viale Treviso, 15
Pordenone (PN) Italy
Tel. +39 0434 3801
epr.chemicals@electroluxprofessional.com

1.4. Emergency telephone number

Ireland (IR): Poisons Information Centre +353 (0)1 809 2166
United Kingdom (UK): Allegrini SpA Tel. +39 035 4242111 Mon. - Fri. 8.00 - 17.00 GMT +1
Singapore: +65 3165 2217

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification pursuant to Regulation (EC) No. 1272/2008:

Pictograms:
GHS05, GHS08

Hazard class and category codes:
Met. Corr. 1, Skin Corr. 1A, STOT RE 2

Hazard indication codes:
H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H373 - May cause damage to organs (respiratory system) through prolonged or repeated exposure (inhalation).

The product may be corrosive to metals.
Corrosive product: causes severe skin burns and eye damage.
Warning: the product may cause serious irreversible harm to human health in cases of prolonged or repeated exposure.

2.2. Label elements

Labelling conforming to regulation (EC) No. 1272/2008:
Pictograms, warning codes:
GHS05, GHS08 – Danger



Hazard indication codes:
H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H373 - May cause damage to organs (respiratory system) through prolonged or repeated exposure (inhalation).

Supplementary hazard indication codes:
Not available

Safety recommendations:
Prevention
P280 - Wear protective gloves/eye protection.
Reaction
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): remove/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.
P310 - Immediately call a POISON CENTRE/doctor.
Disposal
P501 - Dispose of contents/container in accordance with local regulations.

Contains: Sodium Hydroxide (*), EDTA Na4 (*)

Contains (Reg. EC 648/2004): > 15% < 30% EDTA, < 5% Amphoteric surfactants, Phosphonates, Perfumes

2.3. Other hazards

The substance/mixture DOES NOT contain PBT/vPvB substances pursuant to Regulation (EC) 1907/2006, appendix XIII.

The use of this chemical agent entails the obligation of "Risk Evaluation" by the employer according to the provisions of Legislative Decree 9 April 2008 no. 81. Employees exposed to this chemical agent do not need to undergo health monitoring if the results of the risk evaluation demonstrate that, in relation to the type and quantity of hazardous chemical agent and the modality and frequency of exposure to such agents, there is only "Moderate Risk" to the health and safety of employees and that the measures provided for in the same Legislative Decree are sufficient in order to reduce risk.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not pertinent.

3.2 Mixtures

Refer to point 16 for the complete text regarding hazard indications.
NOTE: SUBSTANCES MARKED WITH AN ASTERISK (*) PRESENT SPECIFIC LIMITS

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
EDTA Na4 (*)	> 10 <= 20%	Acute Tox. 4, H302; Eye Dam. 1, H318; Acute Tox. 4, H332; STOT RE 2, H373	607-428-00-2	64-02-8	200-573-9	01-2119486762-27
Sodium hydroxide (*)	>= 5 <= 10%	Met. Corr. 1, H290; Skin Corr. 1A, H314	011-002-00-6	1310-73-2	215-185-5	01-2119457892-27
Citric acid	> 1 <= 5%	Eye Irrit. 2, H319	n.d.	77-92-9	201-069-1	01-2119457026-42

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Ventilate the area. Immediately remove the patient from the contaminated area and allow them to rest in well-ventilated area. In case of illness contact a doctor.

Direct contact with the skin (undiluted product):
Immediately remove contaminated clothing.
In case of contact with the skin, immediately wash the area abundantly with water.
Immediately contact a doctor.

Direct contact with the eyes (undiluted product):
Immediately rinse open eyes abundantly with running water for at least 10 minutes; then protect the eyes with a dry, sterilised bandage. Immediately see a doctor.
Do not use eyewashes or ointments of any kind before undergoing an examination or receiving advice from an optician.

Swallowing:
Administer water with egg-white; do not administer bicarbonate.
Never induce vomiting or emesis. Immediately see a doctor.

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

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

In case of illness, contact a doctor.
Immediately call a POISON CENTRE/doctor.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended extinguishers:
Fog, CO2, foam, chemical powders according to the materials involved in the fire.

Extinguishers to be avoided:
Use water jets only to cool the surfaces of containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use respiratory protection.
Safety helmets and complete protective clothing.
Fog can be used to protect the people involved in extinguishing the fire.
It is furthermore recommended to use breathing apparatus particularly for operations in enclosed and poorly ventilated areas and in any case with the use of halon extinguishers (fluobrene, solkane 123, naf etc.).
Cool the containers with water jets.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:
Move away from the area surrounding the leak or spill. Do not smoke.

6.1.2 For emergency responders:
Wear a mask, gloves and protective clothing.
Eliminate all naked flames and possible sources of ignition. Do not smoke.
Provide adequate ventilation.
Evacuate the area of danger and, if necessary, consult an expert.

6.2. Environmental precautions

Contain leaks with earth or sand.
If the product has flowed into a watercourse, sewer or has contaminated soil or vegetation, contact the competent authorities.
Dispose of the residue in accordance with regulations in force.

6.3. Methods and material for containment and cleaning up

6.3.1 For containment
Quickly collect the product, wearing a mask and protective clothing.
Collect the product for reuse, if possible, or for disposal. If necessary, absorb liquids with inert materials.

Block entry into the sewage system.
6.3.2 For cleaning
Following collection, wash the area and materials involved with water.

6.3.3 Other information:
No particular information.

6.4. Reference to other sections

Refer to points 8 and 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact and the inhalation of fumes.
Do not eat or drink while working.
See also the following paragraph 8.

7.2. Conditions for safe storage, including any incompatibilities

Store the product in its original container, properly closed. Do not store in open or unlabelled containers.
Keep the containers upright and safe, avoiding the possibility of falls or knocks.
Store in a cool place, far from sources of heat and direct exposure to sunlight.

7.3. Specific end use(s)

Professional use:
Handle with care. Store in a ventilated area far from sources of heat. Keep the container properly closed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Relative to the substances contained:

Sodium Hydroxide (*)
TWA (8h): 2 mg/m3 (Ceiling value) (ACGIH 2004)
DNEL
Long term local effects for workers Inhalation = 1
Long term local effects for consumers Inhalation = 1 (mg/m3)

EDTA Na4 (*)
DNEL
Long term systemic effects for workers Inhalation = 2.5 (mg/m3)
Long term systemic effects for consumers Inhalation = 1.5 (mg/m3)
Short term systemic effects for workers Inhalation = 2.5 (mg/m3)
Short term systemic effects for consumers Inhalation = 1.5 (mg/m3)
Long term local effects for consumers Oral = 25 (mg/m3 bw/day)
PNEC
Freshwater = 2.2 (mg/l)
Sea-water = 0.22 (mg/l)
Intermittent emission = 1.2 (mg/l)
STP = 43 (mg/l)
Soil = 0.72 (mg/kg Soil)

Citric acid
PNEC
Freshwater = 0.44 (mg/l)
Freshwater Sediment = 3.46 (mg//kg/Sediment)
Sea-water = 0.044 (mg/l)
Sea-water Sediment = 34.6 (mg//kg/Sediment)
STP = 1000 (mg/l)
Soil = 33.1 (mg/kg Soil)

8.2. Exposure controls

Suitable technical controls:
Professional use:
No controls expected.

Individual protective measures:



a) Protection of the eyes / face
During the handling of the undiluted product use safety goggles (sealed goggles) (EN 166).

b) Skin protection

i) Hand protection
During the handling of the undiluted product use chemical-resistant protective gloves (EN 374-1/EN374-2/EN374-3).

ii) Other
Wear standard work clothing.

c) Respiratory protection
Not necessary for standard use.

d) Thermal hazards
No hazard to indicate.

Environmental exposure controls:
Use according to good working practices, avoiding contamination of the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Method of determination
Appearance	clear yellow liquid	
Odour	lemon	
Odour threshold	not available	
pH	> 13	
Melting point/freezing point	< 0°C	
Initial boiling point and boiling range	approximately 100°C	
Flash point	non flammable	ASTM D92
Evaporation rate	not available	
Flammability (solid, gas)	non flammable	
Upper/lower flammability or explosive limits	non flammable	
Vapour pressure	not available	
Vapour density	not available	
Relative density	1,270 g/ml	
Solubility(ies)	in water	
Solubility in water	complete	
Partition coefficient: n-octanol/water	not available	
Auto-ignition temperature	not available	
Decomposition temperature	not available	

Viscosity	not available	
Explosive properties	non explosive	
Oxidising properties	non oxidising	

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Relative to the substances contained:

Sodium Hydroxide (*)
Exothermic reaction with water.
Reaction with acids and with alkaline earth metals.
Reacts with aluminium and aluminium alloys in the presence of water to form hydrogen.

10.2. Chemical stability

The product is stable.

10.3. Possibility of hazardous reactions

There are no dangerous reactions if handled and stored according to instructions.

10.4. Conditions to avoid

No specific data.

10.5. Incompatible materials

Violent reaction with concentrated acids.

10.6. Hazardous decomposition products

It does not decompose if used for the purposes provided for.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

ATE (mix) oral = N.D.
ATE (mix) dermal = N.D.
ATE (mix) inhal = N.D.

(a) acute toxicity: according to the data available the criteria of classification are not met.
(b) corrosion / irritation of the skin: Corrosive product: causes severe skin burns and eye damage.
(c) severe eye damage / irritation: Corrosive product: causes severe skin burns and eye damage.
(d) sensitisation of respiratory tracts or the skin: according to the data available the criteria of classification are not met.
(e) mutagenicity of germ cells: according to the data available the criteria of classification are not met.
(f) carcinogenicity: according to the data available the criteria of classification are not met.
(g) reproductive toxicity: according to the data available the criteria of classification are not met.
(h) specific target organ toxicity (STOT) single exposure: according to the data available the criteria of classification are not met.
(i) specific target organ toxicity (STOT) repeated exposure: Warning: the product may cause serious irreversible harm to human health in cases of prolonged or repeated exposure
(j) danger of aspiration: according to the data available the criteria of classification are not met.

Relative to the substances contained:

EDTA Na4 (*)
LD50 Oral (rat) (mg/kg of body weight) = 1780

Sodium Hydroxide (*)
LD L0 oral administration (rabbit) = 500 mg/kg
LD50 Skin (rat or rabbit) (mg/kg of body weight) = 1300
CL50 Inhalation (rat) of vapour/dust/aerosol/smoke (mg/l/4h) or gas (ppmV/4h) = 4800

Citric acid
LD50 Oral (rat) (mg/kg of body weight) = 5400
LD50 Skin (rat or rabbit) (mg/kg of body weight) = 2000

SECTION 12: Ecological information

12.1. Toxicity

Relative to the substances contained:

EDTA Na4 (*)
LC50 (fish): > 121 mg/l (96h)
NOEC (fish): >25.7 mg/l (35d)
EC50 (algae): > 100 mg/l (72h)

Sodium Hydroxide (*)
LC50 (fish): 189 mg/l (48h)
EC50 (daphnia): 40.4 mg/l (48h)

Citric acid
LC50 (fish): 440 mg/l (48h)
LC50 (daphnia): 1535 mg/l (24h)
NOEC (algae): 425 mg/l (8d)
TT (micro-organisms): >10000 mg/l (16h)

Use according to good working practices, avoiding contamination of the environment.

12.2. Persistence and degradability

Relative to the substances contained:

EDTA Na4 (*)
Degradability: 0-10% (28d) (OECD Guideline 302 B)

Citric acid
Biodegradability = 97% (28d) (OECD Guideline 301 B)
Easily biodegradable.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substance/mixture DOES NOT contain PBT/vPvB substances pursuant to Regulation (EC) 1907/2006, appendix XIII.

12.6. Other adverse effects

No adverse effects found.
Regulation (EC) no. 2006/907 - 2004/648
The surfactant(s) contained in this formula conform(s) to the criteria for biodegradability established by regulation EC/648/2004 relating to detergents. All supporting data is available to the competent authorities of the Member States and will be supplied, upon their explicit request or on request of a producer of the formula, to the aforementioned authorities.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with regulations in force. Eventual product residue must be disposed of according to regulations in force by contacting an authorised company.
Reuse if possible. Send to an authorised disposal or incinerator plant under controlled conditions. Operate according to local and national dispositions in force.

SECTION 14: Transport information

14.1. UN number



ADR/RID/IMDG/ICAO-IATA: 1719
Eventual exemption from ADR if the following characteristics are satisfied:
Combined packaging: internal packaging 1 L pack 30 Kg
Internal packaging arranged in trays with shrink-wrap or extendible film: internal packaging 1 L pack 20 Kg

14.2. UN proper shipping name

ADR/RID/IMDG: LIQUIDO ALCALINO CAUSTICO N.A.S. (Etilendiamminotetraacetato tetrasodico, Sodio idrossido)
ICAO-IATA: CAUSTIC ALKALI LIQUID, N.O.S. (Tetrasodium ethylenediaminetetraacetate, Sodium Hydroxide)

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class: 8
ADR/RID/IMDG/ICAO-IATA: Label: 8
ADR: Tunnel restriction code: E
ADR/RID/IMDG/ICAO-IATA: Limited quantities: 1 L
IMDG - EmS: F-A, S-B

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: II

14.5. Environmental hazards

ADR/RID/ICAO-IATA: The product is not hazardous for the environment
IMDG: Marine contaminant: No

14.6. Special precautions for user

Transportation must be carried out with vehicles authorised for the transportation of hazardous goods according to the provisions of the current edition of the A.D.R. Agreement and applicable national regulations.
Transportation must be carried out in the original packaging and, in any case, in packaging which is composed of materials which are resistant to the contents and which are not susceptible to the generation of hazardous reactions with the contents.
Those responsible for the loading and unloading of dangerous goods must have received suitable training regarding the risks presented by the substance and the eventual procedures to be adopted in the case of emergency situations.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Bulk transportation is not permitted

SECTION 15: Regulatory information

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

Legislative Decree 3/2/1997 no. 52 (Classification, packaging and labelling of hazardous substances). Legislative Decree 14/03/2003 no. 65 (Classification, packaging and labelling of hazardous substances). Legislative Decree 2/2/2002 no. 25 (Risks deriving from chemical agents during work). Ministerial Decree for Work 26/02/2004 (Professional exposure limits); Ministerial Decree 03/04/2007 (Fulfilment of directive no. 2006/8/EC). Regulation (EC) no. 1907/2006 (REACH), Regulation (EC) no. 1272/2008 (CLP), Regulation (EC) no. 790/2009. Legislative Decree 21 September 2005 no. 238 (Seveso Directive III).

15.2. Chemical safety assessment

The supplier has not carried out an evaluation of chemical safety.

SECTION 16: Other information

16.1. Other information

Descriptions of hazard indications shown in point 3
H302 = Harmful if swallowed.
H318 = Causes serious eye damage.
H332 = Harmful if inhaled.
H373 = May cause damage to organs through prolonged or repeated exposure.
H290 = May be corrosive to metals.
H314 = Causes severe skin burns and eye damage.
H319 = Causes serious eye irritation.

Classification carried out on the basis of data regarding all of the components in the mixture

Principal regulatory references:

Regulation (EC) 1907/2006 of the European Parliament (REACH), as subsequently amended
Regulation (EC) 1272/2008 of the European Parliament (CLP), as subsequently amended
Regulation (EC) 830/2015 of the European Parliament, as subsequently amended
Regulation (EC) 648/2004 of the European Parliament, as subsequently amended

The content of this Safety Data Sheet is based on our current knowledge and provides information on how to handle products safely.
This document is not a Certificate of Analysis nor a technical data sheet and does not constitute an agreement on product specifications.

*** This data sheet annuls and substitutes each previous version.