



De'Longhi Group

Revision no. 4
Revision date 24/10/2018

**COFFEE MACHINE DESCALER
ECODECALK**

Printed on 16/05/2017
Page no. 1/9

Safety Data Sheet

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

1.1. Product identifier

Code: ---
Name: **EcoDecalk, EcoDecalk mini**
Chemical name: *Not applicable*
Registration number: *Not applicable*

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

Description/Use **COFFEE MACHINE LIQUID DESCALER**

1.3. Details of the supplier of the safety data sheet

Company name **De'Longhi Appliances S.r.l.**
Address **via Lodovico Seitz, 47**
City and Country **31100 Treviso (TV)
ITALY**
tel. **+39 (0)422 4131 (Switchboard– office hours Mon-Fri 08:00am – 5:00pm)**
fax **+39 (0)422 413736**
Toll-free number **800 854040 (Mon-Fri 08:00am-6:30pm / Sat 08:00am-12:00pm)**
<http://www.delonghi.com>
e-mail msds.helpdesk.delonghi@delonghigroup.com

1.4. Emergency telephone number

For urgent information contact **tel. +39 (0)422 4131 (Switchboard– office hours Mon-Fri 08:00/12:30 – 13:30/17:00)**

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as dangerous pursuant to the provisions of regulation (EC) (CE) 1272/2008 (CLP) (as amended). Accordingly, the product requires a safety data sheet in fulfilment of the provisions of Regulation (EC) 1907/2006 as amended. Any additional information on personal and/or environmental health risks are provided in sections 11 and 12 of this data sheet.

Classification and identification of hazards:

Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.

The complete text of the hazard statements (H) is provided in section 16 of the sheet.

2.2. Label elements

Hazard labelling according to (EC) Regulation 1272/2008 (CLP) and subsequent amendments and additions.



Warnings: **Danger**



De'Longhi Group

Revision no. 4
Revision date 24/10/2018

COFFEE MACHINE DESCALER ECODECALK

Printed on 16/05/2017
Page no. 2/9

Hazard statements:

H318 Causes serious eye damage.
H315 Causes skin irritation.

Precautionary statements:

P102 Keep out of reach of children.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves / eye protection / face protection.
P302+P352 IF ON SKIN: Wash with plenty of water
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
P501 Dispose of contents / container according to local laws.

Contains: LACTIC ACID

2.3. Other hazards.

According to the available data, the product does not contain PBT or vPvB substances in percentage higher than 0.1%.

SECTION 3 Composition/information on ingredients.

3.1. Substances.

Not applicable. The product is a mixture

3.2. Mixtures.

Contains:

Identification	Conc. %.	Classification 1272/2008 (CLP).
LACTIC ACID		
CAS. 79-33-4	30 - 50	Eye Dam. 1 H318, Skin Irrit. 2 H315
CE. 201-196-2		
INDEX. -		
Reg. No. 01-2119474164-39-xxxx		

Note: Upper value of the range excluded.

The complete text of the hazard statements (H) is provided in section 16 of the sheet.

SECTION 4 First aid measures.

General information: consult a physician. Show this safety data sheet to the doctor in attendance.

4.1. Description of first-aid measures.

Not specifically required. Nevertheless, use of good industrial hygiene practices is recommended.

EYES: wash immediately and abundantly with water for at least 15 min. Consult a physician.

SKIN: wash abundantly with water and soap. Remove any contaminated clothing. If the irritation persists, consult a physician. Wash contaminated clothing before reuse.

INHALATION: take the individual outdoors. If breathing is difficult, consult a physician.

SWALLOWING: consult a physician. Only induce vomiting if a physician tells you to do so. Do not administer anything orally if the individual is unconscious and if not authorised by a physician.

4.2. Main symptoms and effects, both acute and delayed.

For symptoms and effects due to contained substances see chap. 11.

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

Follow the instructions provided by the physician.

SECTION 5 Firefighting measures.



**COFFEE MACHINE DESCALER
ECODECALK**

5.1. Extinguishing media.

SUITABLE EXTINGUISHING MEDIA

Traditional fire-extinguishing methods are applicable: carbon dioxide, foam, powder and water spray.

UNSUITABLE FIRE-EXTINGUISHING METHODS

None in particular.

5.2. Special hazards arising from the substance or preparation.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION

Cool the containers with water jets to prevent the product from decomposing and potentially harmful substances from developing. Always wear equipment provided with fire-fighting protection devices. Collect fire extinguishing water that must not be discharged into drains. Dispose of the contaminated fire extinguishing water and fire residues according to the standards in force.

EQUIPMENT

Wear normal fire-fighting clothes, such as self-contained, open-circuit compressed air breathing apparatus (EN 137), flame resistant clothing (EN469), flame resistant gloves (EN 659) and fire-fighter boots (HO A29 or A30).

SECTION 6 Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel :

Keep a distance and wait for the designated emergency staff to intervene and place the area where the release occurred in safe conditions.

6.1.2 For emergency responders:

Wear personal protective equipment (including personal protective equipment, as set forth in section 8 of the safety data sheet) in order to prevent contaminating skin, eyes and personal clothing.

In case of vapours or powders dispersed in the air, use respiratory protective equipment. These instructions apply to both staff involved in processing and emergency interventions.

6.2. Environmental precautions.

Prevent the product from getting into sewer systems, surface water, phreatic zones.

6.3. Methods and material for containment and cleaning up.

Vacuum the spilled product into a suitable container. Assess the compatibility of the container to be used with the product, checking section 10. Absorb the remainder with inert absorbent material.

Provide the area concerned by the spillage with sufficient aeration. Verify any incompatibility for the material of the containers in section 7. The disposal of contaminated material must be carried out in accordance with the provisions of point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is provided in sections 8 and 13.

SECTION 7 Handling and storage.

7.1. Precautions for safe handling.

Avoid contact with eyes and skin. Do not inhale vapours.

Handle the product after having consulted all other sections of this safety data sheet. Do not dispose of in the environment. Do not eat, drink, or smoke during use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Safe storage conditions, including any incompatibility.

Only store in the original container. Store the closed recipients in a well ventilated area, sheltered against direct sunlight. Store the containers away from any incompatible material; refer to section 10.

7.3. Special end-uses.

Information not available.

**COFFEE MACHINE DESCALER
ECODECALK****SECTION 8 Exposure controls/personal protection.****8.1. Control parameters.**

Lactic Acid: DNEL cannot be determined.

8.2. Exposure controls.

Considering that the use of suitable technical measures must always have the priority in terms of personal protection equipment, provide good ventilation in the work place through efficient local extraction.

When choosing personal protective equipment, ask the advice of your chemical substance suppliers.

The personal protective movement must bear the CE marking certifying its conformity to standards in force.

Provide an emergency shower with eye wash bath.

HAND PROTECTION

Protect hands with category III work gloves (ref. standard EN 374) made of PVC, neoprene, nitrile or similar.

Consider the following for the definitive choice of work glove materials: compatibility, degradation, rupture time and permeation.

With preparations, work glove resistance to chemicals must be tested prior to use, as it cannot be predicted. Glove wear time depends on the duration of method of use.

SKIN PROTECTION

Wear category II professional use long-sleeved work clothes and safety footwear (ref. Directive 89/686/EEC and standard ISO 20344). Wash with water and soap after removing the protective clothing.

EYE PROTECTION

We recommend wear a visor-view hood or protective visor worn with hermetic safety goggles (ref. standard EN 166).

Provide an eye washing system and emergency shower.

RESPIRATORY PROTECTION

If the limit value (e.g. TLV-TWA) of the substance or one or more substances contained in the preparation is exceeded, it is recommended to wear a mask with type A filter with class (1, 2 or 3) selected based on the maximum concentration of use. (ref. standard EN 14387).

Using respiratory protection devices is required if the technical measures taken are not sufficient to limit the exposure of the worker within the threshold values considered. The protection provided by the masks is nevertheless limited.

If the substance in question is odourless or if its odour detection threshold exceeds the relative TLV-TWA and in case of emergency, wear an open-circuit compressed-air breathing apparatus (ref. standard EN 137) or a fresh air hose breathing apparatus (ref. standard EN 138). Refer to standard EN 529 for the correct choice of the respiratory protective device.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions from production processes, including from ventilation equipment, should be controlled with the aim of observing standards on environmental protection.

SECTION 9 Physical and chemical properties.**9.1. Information on basic physical and chemical properties**

Appearance	liquid
Colour	Transparent colourless/light yellow
Smell	characteristic
Odour threshold.	Not available.
pH.	2.40 ÷ 2.80 (at 20°C)
Melting point/freezing point.	7°C approximately
Initial boiling point and boiling range.	101-103°C.
Boiling range.	Not available.
Flammability (solid, gas).	> 60 °C.
Evaporation rate	Not available.
Solids and gas flammability	Not applicable because the product is liquid [see guideline "Endpoint specific guidance R.7.1.10 Flammability Version 2.4 – February 2014"]
Lower flammability limit.	Not available.
Upper flammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour Density	Not available.
Relative density	~1.01 ÷ 1.11 Kg/l (at 20°C)
Solubility	water soluble
Partition coefficient: n-octanol/water:	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	> 200°C
Viscosity	Not available.



**COFFEE MACHINE DESCALER
ECODECALK**

Explosive properties
Oxidizing properties

Not available.
Not available.

9.2. Other information.

VOC (Directive 1999/13/EC) : 0

VOC (volatile carbon) : 0

SECTION 10 Stability and reactivity.

10.1. Reactivity.

There are no particular risks of reaction with other substances under normal use conditions.

Avoid contact with strong bases and strong oxidants

10.2. Chemical stability.

The product is stable under normal use and storage conditions.

10.3. Possibility of hazardous reactions.

Hazardous reactions under normal use and storage conditions are not predictable.

10.4. Conditions to avoid.

None in particular. Nonetheless, always observe the usual precautions required with chemical products. Do not heat the closed containers.

10.5. Incompatible materials.

Strong oxidising agents.

10.6. Hazardous decomposition products

Information not available.

SECTION 11 Toxicological information.

11.1. Information on toxicological effects.

Without any experimental toxicological data on the product itself, any health hazards posed by the product have been assessed based on the properties of the substances it contains, according to the criteria set forth in the reference standard for classification. Therefore, consider the concentration of any individual hazardous substances reported in sec. 3 to assess the toxicological effects caused by exposure to the product.

This product can cause serious eye lesions and can cause corneal opacity, iris lesions, irreversible eye colouration.

Acute effects: contact with the skin leads to irritation with rash, oedema, dryness and peeling.

Swallowing can cause health ailments, which include abdominal pain with burning, nausea and vomiting.

a) acute toxicity;

Data referring to the hazardous components:

LACTIC ACID

LD50 (Oral): 3730 mg/Kg acute-rat

LD50 (Dermal): > 2000 mg/Kg acute-rabbit.

b) Skin corrosion/irritation

On the basis of calculations and data on similar substances or components, the mixture is classified as skin irritant.

c) Serious eye damage/irritation

On the basis of calculations and data on , the mixture causes serious eye damage.

d) RespiratorY or skin sensitisation

On the basis of calculations and data on similar substances or components, the mixture is not classified in this hazard class.

e) Germ cell mutagenicity

On the basis of calculations and data on similar substances or components, the mixture is not classified in this hazard class.

f) carcinogenicity

On the basis of calculations and data on similar substances or components, the mixture is not classified in this hazard class.

g) reproductive toxicity

On the basis of calculations and data on similar substances or components, the mixture is not classified in this hazard class.

h) (STOT) – single exposure

On the basis of calculations and data on similar substances or components, the mixture is not classified in this hazard class.

i) (STOT) – repeated exposure



De'Longhi Group

**COFFEE MACHINE DESCALER
ECODECALK**

Revision no. 4
Revision date 24/10/2018

Printed on 16/05/2017
Page no. 6/9

On the basis of calculations and data on similar substances or components, the mixture is not classified in this hazard class.

j) aspiration hazard

On the basis of calculations and data on similar substances or components, the mixture is not classified in this hazard class.

SECTION 12 Ecological information.

12.1. Toxicity.

Use according to good working practices. Do not dispose of in the environment. Inform the competent authorities in the event the product reaches waterways or sewers or it contaminates soil or vegetation.

LACTIC ACID

LC50 (96h): 320 mg/l Brachydanio rerio (fish)

LD 50 Daphnia Magna (48h): 240 mg/l.

12.2. Persistence and degradability

Information not available.

12.3. Bioaccumulative potential

Information not available.

12.4. Mobility in soil.

Lactic acid is predominantly distributed in the aqueous compartment.[Calc Key Distribution modelling.001 REACH registration]

12.5. Results of PBT and vPvB assessment.

According to the available data, the product does not contain PBT or vPvB substances in percentage higher than 0.1%.

12.6. Other adverse effects.

Information not available.

SECTION 13 Disposal considerations.

13.1. Waste treatment methods.

Dispose of as unused product.

Re-use, if possible. The product residues are considered special hazardous waste. The hazard levels of the waste that contains any amount this product must be assessed based on legislation in force.

The exhausted product must be consigned to an authorised waste disposal company, in compliance with national and local laws.

CONTAMINATED PACKAGES

Contaminated packages must be recovered or disposed of in compliance with waste management national standards.

SECTION 14 Transport information.

14.1 UN number.

Not applicable.

14.2. UN proper shipping name.

Not applicable.

14.3. Transport hazard class(es).



De'Longhi Group

Revision no. 4
Revision date 24/10/2018

**COFFEE MACHINE DESCALER
ECODECALK**

Printed on 16/05/2017
Page no. 7/9

Not applicable.

14.4. Packaging group.

Not applicable.

14.5. Environmental hazards.

Not applicable.

14.6. Special precautions for users.

Not applicable.

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

Irrelevant information.

SECTION 15 Regulatory information.

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

Seveso category. None.

Restrictions relative to the product or to the substances contained according to Annex XVII EC Regulation 1907/2006.

Product Point. 3

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV - REACH).

None.

Substances subject to export notification EC Reg. 649/2012:

None.

Substances Under the Rotterdam Convention Regulations:

None.

Substances Under the Stockholm Convention Regulations

None.

Healthcare controls.

Any workers exposed to this chemical agent, that is hazardous to the health, must receive health supervision, carried out according to the provisions of art. 41 of Lgs. D. 81 of April 9, 2008 unless the safety and health risks of the worker have been assessed as irrelevant, according to art. 224, paragraph 2.

Indication of content Reg. (EC) 648/2004: -

15.2. Chemical Safety Assessment

No chemical safety assessment of the mixture has been drawn up. A chemical safety assessment for the hazardous substances it contains has been processed.



De'Longhi Group

Revision no. 4
Revision date 24/10/2018

**COFFEE MACHINE DESCALER
ECODECALK**

Printed on 16/05/2017
Page no. 8/9

SECTION 16 Other information.

Text indicating the hazards (H) reported in sections 2-3 of the data sheet:

Eye Dam. 1	Serious eye damage, category 1
Skin Irrit. 2	Skin irritation, category 2
H318	Causes serious eye damage.
H315	Causes skin irritation.

KEY:

- ADR: European agreement concerning the transport of dangerous goods by road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Concentration that gives effect to 50% of the population tested
- EC NUMBER: ESIS (Existing Substances Information System) Identification Number
- CLP: EC Regulation No.1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonised System of classification and labelling of chemicals
- IATA DGR: Regulations for the transport of dangerous goods by the International Air Transport Association
- IC50: Immobilisation Concentration 50% of the population tested
- IMDG: International maritime code on the transport of dangerous goods
- IMO: International Maritime Organisation
- INDEX NUMBER: Identification number in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent Bioaccumulative and Toxic according to REACH Regulation
- PEC: Predicted Environmental Concentration
- PEL: Predicted Exposure Level
- PNEC: Predicted No Effect Concentration
- REACH: EC Regulation No.1907/2006
- RID: Regulations for the international carriage of dangerous goods by rail
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term Exposure Limit
- TWA: Time-Weighted Average exposure limit
- VOC: Volatile Organic Compounds
- vPvB: Very Persistent and very Bioaccumulative according to REACH Regulation
- WGK: German water hazard class.

GENERAL BIBLIOGRAPHY:

- Regulation (EC) 1907/2006 of the European Parliament (REACH)
- Regulation (EC) 1272/2008 of the European Parliament (CLP)
- Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
- Regulation (EC) 453/2010 of the European Parliament
- Regulation (EC) 286/2011 of the European Parliament (II Atp. CLP)
- Regulation (EC) 618/2012 of the European Parliament (III Atp. CLP)
- Regulation (EC) 487/2013 of the European Parliament (IV Atp. CLP)
- Regulation (EC) 944/2013 of the European Parliament (V Atp. CLP)
- Regulation (EC) 605/2014 of the European Parliament (VI Atp. CLP)
- Regulation (EC) 1297/2014 of the European Parliament (VII Atp. CLP)
- EU Regulation 830/2015

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA Agency website

Note for the user:

The information contained in this data sheet is based on the knowledge available to us when the latest version was issued. Users must make sure the information is suitable and exhaustive in relation to the specific use of the product.

This document must not be considered a guarantee on any specific property of the product.

As the use of this product is not subject to our direct control, users must comply, under their own responsibility, with current hygiene and safety laws and



De'Longhi Group

Revision no. 4
Revision date 24/10/2018

**COFFEE MACHINE DESCALER
ECODECALK**

Printed on 16/05/2017
Page no. 9/9

provisions. We accept no responsibility for improper use.
Provide suitable information to the personnel in charge of using chemicals.

Amendments in relation to the previous revision.
Amendments have been made to the following sections:
01