



De'Longhi Group

Ser3013 - MILK CLEAN

Revision No. 1

Dated 19/02/2016

Printed on 19/02/2016

Pagina n. 1/11

## Safety Data Sheet

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

#### 1.1. Product identifier

Code: Ser3013  
Product name: MILK CLEAN

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

Intended use: DEGREASER FOR THE FROTHING SPOUTS OF CAPPUCCINO COFFEE MACHINES

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

Name: De'Longhi Appliances s.r.l.  
Full address: via Lodovico Seitz, 47  
District and Country: 30100 Treviso (TV)  
ITALY  
Ph. +39 0422 4131 (08:00/12:00 - 13:00/17:00)  
Fax +39 0422 413736

e-mail address of the competent person

responsible for the Safety Data Sheet

[msds.helpdesk.delonghi@delonghigroup.com](mailto:msds.helpdesk.delonghi@delonghigroup.com)

#### 1.4. Emergency telephone number

For urgent inquiries refer to

Poison Centre (24/24h)  
**UK**  
+44 28 90 63 2032 (Belfast)  
+44 121 507 4123 (Birmingham)  
+44 131 242 1383 (Edinburgh)  
+44 191 2606182/+44 191 2606180 (Newcastle)  
+44 292 071 55 54 (Penarth)  
**Australia**  
+61 7 363 68 148 (Brisbane)  
+61 394 96 4509 (Heidelberg)  
+61 893 46 1943 (Nedlands)  
+61 2 9845 3969 (Sydney)  
**New Zealand**  
+64 3 479 7227 (Dunedin)  
**South Africa**  
+27 514 013 090 (Bloemfontein)  
+27 21 658 53 08 (Rondebosch)  
+27 21 931 61 29 (Tygerberg)

### SECTION 2. Hazards identification.

#### 2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2

H319

Causes serious eye irritation.

#### 2.2. Label elements.



Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.



Signal words: Warning

Hazard statements:

**H319** Causes serious eye irritation.

Precautionary statements:

**P101** If medical advice is needed, have product container or label at hand.

**P102** Keep out of reach of children.

**P264** Wash hands thoroughly after handling.

**P280** Wear 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.

**P337+P313** If eye irritation persists: Get medical advice / attention.

### 2.3. Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

## SECTION 3. Composition/information on ingredients.

### 3.1. Substances.

Information not relevant.

### 3.2. Mixtures.

Contains:

Identification.	Conc. %.	Classification 1272/2008 (CLP)
<b>ETHYLENEDIAMINETETRAACETATE</b> CAS. 64-02-8 EC. 200-573-9 INDEX. 607-428-00-2 Reg. no. 01-2119486762-27	1 - 3	Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Dam. 1 H318
<b>ETHANOLAMINE</b> CAS. 141-43-5 EC. 205-483-3 INDEX. 603-030-00-8 Reg. no. 01-2119486455-28	0,6 - 1	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1B H314, STOT SE 3 H335
<b>TRISODIUM NITRILOTRIACETATE</b>		



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CAS. 5064-31-3

0,1 - 0,15

Carc. 2 H351, Acute Tox. 4  
H302, Eye Irrit. 2 H319

EC. 225-768-6

INDEX. 607-620-00-6

Reg. no. 01-2119519239-36

Note: Upper limit is not included into the range.

The full wording of hazard (H) phrases is given in section 16 of the sheet.

## SECTION 4. First aid measures.

### 4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

## SECTION 5. Firefighting measures.

### 5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

### 5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

### 5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).



## SECTION 6. Accidental release measures.

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

6.1.1. For those not directly involved: keep back from the place where the release has occurred and wait for intervention of those involved in the emergency procedures, so that the area can be made safe.

6.1.2. For those directly involved in the emergency procedures: wear suitable protection equipment (including the personal protection equipment given in section 8) so as to avoid contamination of skin, eyes and professional equipment.

### 6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections.

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

## SECTION 7. Handling and storage.

### 7.1. Precautions for safe handling.

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

### 7.3. Specific end use(s).

Information not available.

## SECTION 8. Exposure controls/personal protection.

### 8.1. Control parameters.

Regulatory References:

AUS	Österreich	Grenzwerteverordnung 2011 - GKV 2011
BEL	Belgique	AR du 11/3/2002. La liste est mise à jour pour 2010
CHE	Suisse / Schweiz	Valeurs limites d'exposition aux postes de travail 2012. / Grenzwerte am Arbeitsplatz
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GRB	United Kingdom	EH40/2005 Workplace exposure limits
IRL	Éire	Code of Practice Chemical Agent Regulations 2011
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2014

**ETHANOLAMINE****Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	2,5	1	7,6	3	SKIN.
VLEP	BEL	2,5	1	7,6	3	SKIN.
VEL	CHE	5	2	10	4	
MAK	CHE	5	2	10	4	
AGW	DEU	5,1	2	10,2	4	SKIN.
MAK	DEU	5,1	2	10,2	4	
VLEP	FRA	2,5	1	7,6	3	SKIN.
WEL	GRB	2,5	1	7,6	3	SKIN.
OEL	IRL	2,5	1	7,6	3	SKIN.
TLV	ITA	2,5	1	7,6	3	SKIN.
OEL	EU	2,5	1	7,6	3	SKIN.
TLV-ACGIH		7,5	3	15	6	

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

**8.2. Exposure controls.**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

**HAND PROTECTION**

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

**SKIN PROTECTION**

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

**EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

**RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**ENVIRONMENTAL EXPOSURE CONTROLS.**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.



## SECTION 9. Physical and chemical properties.

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

Appearance	liquid
Colour	colourless
Odour	Not available.
Odour threshold.	Not available.
pH.	10,5- 11,2
Melting point / freezing point.	Not available.
Initial boiling point.	Not available.
Boiling range.	Not available.
Flash point.	> 60 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	not applicable
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	1,010 Kg/l
Solubility	soluble in water
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not available.
Explosive properties	not applicable
Oxidising properties	Not available.

### 9.2. Other information.

Information not available.

## SECTION 10. Stability and reactivity.

### 10.1. Reactivity.

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

### 10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

### 10.4. Conditions to avoid.

None in particular. However the usual precautions used for chemical products should be respected.

### 10.5. Incompatible materials.

Information not available.

### 10.6. Hazardous decomposition products.

Information not available.

## SECTION 11. Toxicological information.

### 11.1. Information on toxicological effects.



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In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

a) acute toxicity

ETHYLENEDIAMINETETRAACETATE

LD50 Rat (oral): > 2.000 mg/kg.

LC50 Rat (inhalatory): 1000 – 5000 mg/ m<sup>3</sup> 6 h (OCSE - TG 403)

Analogism: evaluation resulting from other products with similar chemical characteristics.

According to the calculations made and to the known data regarding similar substances or components, the product is not classified in this class of hazard.

b) Skin corrosiveness/skin irritation:

ETHYLENEDIAMINETETRAACETATE

Skin corrosiveness/irritation (rabbit): not irritating.

According to the calculations made, to pH, and to the known data regarding similar substances or components, the product is not classified in this class of hazard.

c) serious eye damage/eye irritation:

ETHYLENEDIAMINETETRAACETATE

Serious eye damage on rabbit.

According to the calculations made and to the known data regarding similar substances or components, the product is classified in this class of hazard (eye irritation).

d) respiratory or skin sensitization:

ETHYLENEDIAMINETETRAACETATE

Guinea Pig Maximization Test: not sensitizing (OECD – TG 406).

The product has not been tested. The indications are derived from substances/products having similar structure or composition.

According to the calculations made and to the known data regarding similar substances or components, the product is not classified in this class of hazard.

e) germ cell mutagenicity:

ETHYLENEDIAMINETETRAACETATE

In most experiments carried out (bacteria/micro-organisms/cell culture) no mutagenic effect has been observed. No mutagenic effect was even observed on animal testing.

According to the calculations made and to the known data regarding similar substances or components, the product is not classified in this class of hazard.

f) cancerousness:

ETHYLENEDIAMINETETRAACETATE

No carcinogenicity has been observed in long-term studies in rats and mice, orally administered in food.

According to the calculations made and to the known data regarding similar substances or components, the product is not classified in this class of hazard.

g) toxicity for reproduction:

ETHYLENEDIAMINETETRAACETATE

Animal studies do not indicate harmful effects with respect to fertility.

According to the calculations made and to the known data regarding similar substances or components, the product is not classified in this class of hazard.

h) specific toxicity for target organs (STOT) – single exposure:



According to the calculations made and to the known data regarding similar substances or components, the product is not classified in this class of hazard.

i) specific toxicity for target organs (STOT) – repeated exposure:

According to the calculations made and to the known data regarding similar substances or components, the product is not classified in this class of hazard.

j) aspiration hazard:

According to the calculations made and to the known data regarding similar substances or components, the product is not classified in this class of hazard.

## SECTION 12. Ecological information.

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

### 12.1. Toxicity.

Information not available.

ETHYLENEDIAMINETETRAACETATE:

Fish toxicity:

CL50 (96 h) > 100 mg/l, *Lepomis macrochirus* (OPP 72-1 (EPA), static)

Aquatic invertebrates:

CE50 (48 h) > 100 mg/l, *Daphnia magna* (DIN 38412 part 11, static)

Aquatic plants:

CE50 (72 h) > 100 mg/l (growth rate), *Scenedesmus obliquus* (Directive 88/302/EEC, part C, p89, static)

Micro-organisms/Effects on activated sludge:

CE20 (30 min) > 500 mg/l, activated sludge, domestic (OECD - TG 209, aquatic)

Chronic toxicity tested on fish:

NOEC (35 d) >= 36,9 mg/l, *Brachydanio rerio* (TG OECD 210, Fluid)

Chronic toxicity tested on aquatic invertebrates:

NOEC (21 d) 25 mg/l, *Daphnia magna* (OECD - TG 211, semistatic)

Ground dwelling organisms:

CL50 (14 d) 156 mg/kg, *Eisenia foetida* (OECD - TG 207, artificial ground).

### 12.2. Persistence and degradability.

ETHANOLAMINE

Solubility in water. mg/l 1000 – 10000

Rapidly biodegradable.

### 12.3. Bioaccumulative potential.

ETHANOLAMINE

Partition coefficient: n-octanol/water. -2,3

ETHYLENEDIAMINETETRAACETATE:

Bioconcentration factor: approx.. 1,8 (28 d), *Lepomis macrochirus*.

Low accumulation in organisms.

### 12.4. Mobility in soil.

ETHANOLAMINE

Partition coefficient: soil/water. -0,5646





**12.5. Results of PBT and vPvB assessment.**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**12.6. Other adverse effects.**

Information not available.

**SECTION 13. Disposal considerations.**

**13.1. Waste treatment methods.**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

**CONTAMINATED PACKAGING**

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information.**

**14.1. UN number.**

Not applicable.

**14.2. UN proper shipping name.**

Not applicable.

**14.3. Transport hazard class(es).**

Not applicable.

**14.4. Packing group.**

Not applicable.

**14.5. Environmental hazards.**

Not applicable.

**14.6. Special precautions for user.**

Not applicable.

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

Information not relevant.

**SECTION 15. Regulatory information.**

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

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.  
Point. 3

Substances in Candidate List (Art. 59 REACH).  
None.

Substances subject to authorization (Annex XIV REACH).  
None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:



None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Ingredients compliant with EC Regulation No. 648/2004

< 5% EDTA and its Salts, Amphoteric Surfactants. 5 to 15% Non-Ionic Surfactants.

**15.2. Chemical safety assessment.**

No chemical safety assessment has been processed for the mixture and the substances it contains.

## SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Carc. 2</b>	Carcinogenicity, category 2
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>H351</b>	Suspected of causing cancer.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H335</b>	May cause respiratory irritation.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level



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- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- 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 as for REACH Regulation
- WGK: Water hazard classes (German).

#### GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - ECHA website

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

#### Changes to previous review:

The following sections were modified:

03 – 16.