Safety data sheet

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

1.1. Product identifier

Code:	**ZARAM031**
Product name	**COMBICLEAN**

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

Intended use	**OVEN/GRILL CLEANER**

1.3. Details of the supplier of the safety data sheet

Name	**ALI S.p.A.**
Full adress District and country	**VIA SCHIAPARELLI, 15** **31029 VITTORIO VENETO (TV)** **ITALY**
	tel. +39 0438 9110
	fax +39 0438 912300
e-mail address of the competent person responsible for the material safety data sheet	**lainox@lainox.it**
Product distributed by:	**ALI S.p.A.**

1.4. Emergency telephone number

For urgent inquiries refer to

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.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

Met. Corr. 1	H290
Skin Corr. 1A	H314
Eye Dam. 1	H318

2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols:
C
R phrases:
35

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

2.2. Label elements.

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

Hazard pictograms:

Signal words: Danger

Hazard statements:

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

Precautionary statements:

P234	Keep only in original container.
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): 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 CENTER or doctor / physician.

Contains: SODIUM HYDROXIDE

2.3. Other hazards.

Information not available.

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
SODIUM HYDROXIDE			
CAS. 1310-73-2 EC. 215-185-5 INDEX. 011-002-00-6 Reg. no. 01-2119457892-27	20 - 45	C R35	Met. Corr. 1 H290, Skin Corr. 1A H314
ALCYL ETHER OF CARBOXYLIC ACID			
CAS. - EC. polimero INDEX. - Reg. no. polimero	1 - 5	Xi R38, Xi R41	Eye Dam. 1 H318, Skin Irrit. 2 H315

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

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

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.

In case of health disorder seek medical advice and follow his directions. Do not give anything by mouth to an unconscious person. Always seek medical advice in case of doubt or when symptoms may arise even where not provided. Speaking with a doctor keep available the material safety data sheet or failing this, the label. In case of inhalation of decomposition products in a fire symptoms may be delayed. Keep the exposed person under medical surveillance for 48 hours.

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.

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.

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

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. 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.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Compatible materials:
Plastics: polyethylene, polypropylene, polyvinylchloride (PVC), teflon.
Metals: stainless steel AISI304, AISI316, AISI440, lined steel, titanium, hastelloy C.

Incompatible materials:
Plastics: acetalic resins, polyamides, polycarbonate
Metals: galvanized surfaces, carbon steel, bronze, brass, aluminum and alloys.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

United Kingdom	EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended).
Éire	Code of Practice Chemical Agent Regulations 2011.
OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
TLV-ACGIH	ACGIH 2012

SODIUM HYDROXIDE

Threshold Limit Value.					
Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH				2 (C)	
OEL	IRL			2	
WEL	UK			2	

Health - Derived no-effect level - DNEL / DMEL								
	Effects on consumers.				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation.			1 mg/m3	VND			1 mg/m3	VND

Legend:
(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

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.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
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.

Suitable gloves for protection:
Material: PVC, butyl rubber, neoprene lined with natural rubber
Penetration time: > 480 minutes
Protection level: > 6

SKIN PROTECTION
Wear category III 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 a hood visor or protective visor combined with airtight 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 P2 filter (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	yellowish
Odour	characteristic
Odour threshold.	Not available.
pH.	14
Melting point / freezing point.	< 0 ℃.
Initial boiling point.	105 ℃.
Boiling range.	105 ℃ – 110 ℃.
Flash point.	> 60 ℃.
Evaporation Rate	Not available.
Flammability of solids and gases	Not flammable.
Lower inflammability limit.	Not flammable.
Upper inflammability limit.	Not flammable.
Lower explosive limit.	Not explosive.
Upper explosive limit.	Not explosive.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	1,1 – 1,3 Kg/l
Solubility	Water soluble.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	>200 ℃.
Viscosity	1 – 50 mPa.s
Explosive properties	Not explosive.
Oxidising properties	Not oxidizing.

9.2. Other information.

VOC (Directive 1999/13/EC) :	0
VOC (volatile carbon) :	0

SECTION 10. Stability and reactivity.

10.1. Reactivity.

The product may react exothermically on contact with strong acids.

10.2. Chemical stability.

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

10.3. Possibility of hazardous reactions.

See paragraph 10.1.

10.4. Conditions to avoid.

Avoid contact with strong acids and oxidizing agents.

10.5. Incompatible materials.

Strong acids and oxidising or reducing agents

10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released (carbon oxides, sodium oxides, phosphorous oxides, nitrogen oxides, pyrolisis products).

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

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.
This product is corrosive and causes serious burns and vesicles on the skin, which can arise even after exposure. Burns are very stinging and painful. Upon contact with eyes, it may cause serious harm, such as cornea opacity, iris lesions, irreversible eye coloration. Possible vapours are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours.
Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness.
If swallowed, it may cause mouth, throat and oesophagus burns, sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

SODIUM HYDROXIDE
LD50 (Oral). >1350 mg/kg Rat
LD50 (Dermal). >1350 mg/kg Rat
LC50 (inhalation) 4800 mg/kg/h, mouse

ALCYL ETHER OF CARBOXYLIC ACID
LD50 (Oral). >2000 mg/kg Rat

SECTION 12. Ecological information.

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

12.1. Toxicity.

SODIUM HYDROXIDE
LC50 - for Fish.
35 mg/l/96h
EC50 - for Crustacea.
40,4 mg/l/48h Ceriodaphnia dubia

ALCYL ETHER OF CARBOXYLIC ACID
LC50 - for Fish.
>100 mg/l/96h

12.2. Persistence and degradability.

SODIUM HYDROXIDE
Not applicable.

Regulation (CE) n. 648/2004 and 907/2006
The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 and subsequent amendments on detergents. All data are held at the disposal of the competent authorities of the Member States and will be made, at their direct request or at the request of a detergent manufacturer to these authorities.

Comply with the limits for discharges imposed by local regulations.

12.3. Bioaccumulative potential.

The ingredients in this product have a low bio-concentration factor.

12.4. Mobility in soil.

Given the complete solubility in water of the product the mobility in soil is very high.

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 authorised waste management firm, in compliance with national and local regulations.
Avoid littering. Do not contaminate soil, sewers and waterways.
Waste transportation may be subject to ADR restrictions.
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

UN 1824

14.2. UN proper shipping name

ADR-RID-AND IMDG-IATA/IACAO: SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

ADR-RID-AND IMDG-IATA/IACAO: 8

14.4. Packing group

ADR-RID-AND IMDG-IATA/IACAO: II

14.5. Environmental hazards

ADR-RID-AND-IATA/IACAO: NO
IMDG: NO

14.6. Special precautions for users

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the requirements in the current edition of the ADR And the applicable national regulations. The goods must be packed in their original, or in packagings in packagings made of materials resistant to their content and not likely to generate dangerous reactions. People loading and unloading dangerous goods must have received appropriate training about the risks deriving from these substances and the actions that must be taken in case of emergency situations. Please note that the securing of the load must be carried out according to the instructions in Section 7.5.7.1 of the ADR code.

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

Not applicable.

SECTION 15. Regulatory information.

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

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 authorisarion (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.

German regulation on the classification of substances hazardous to water (VwVwS 2005).

WGK 1: Low hazard to waters

Ingredients according to Regulation (EC) No 648/2004

less than 5 % anionic surfactants, phosphonates

15.2. Chemical safety assessment.

A chemical safety assessment has been performed for the following contained substances.

SODIUM HYDROXIDE

SECTION 16. Other information.

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

Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Skin Corr. 1A	Skin corrosion, category 1A
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R35 CAUSES SEVERE BURNS.

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
- 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. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
9. The Merck Index. - 10th Edition
10. Handling Chemical Safety
11. Niosh - Registry of Toxic Effects of Chemical Substances
12. INRS - Fiche Toxicologique (toxicological sheet)
13. Patty - Industrial Hygiene and Toxicology
14. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
15. 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:
02 / 03 / 04 / 05 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15 / 16.

ANNEX. Exposure scenario for ingredients

EXPOSURE SCENARIO SODIUM HYDROXIDE

1. Short title of exposure scenario: Professional use	
Sector of use (SU).	SU 22
Product category (PC).	PC35
Process category (PROC).	PROC19
Environmental release category (ERC).	ERC8a
2. Contributing scenario controlling environmental exposure	
Product characteristiques	Concentrations up to 100%.
Use frequency	Continuous exposure.
Technical conditions and specific measures to prevent or limit discharges, air emissions and release to soil	Regular control of pH value during introduction into open waters is required. In general discharges should be carried out such that pH changes in receiving surface aters are minimized. In general most aquatic organisms can tolerate pH values in the range 6-9. This is also reflected in the description standard OECD tests with aquatic organisms. Risk management measures related to the environment aim to avoid discharging the substance into municipal wastewater or to surface water, in case such discharges are expected to cause significant pH changes.
Conditions and measures related to external treatment of waste for disposal	Waste should be reused or discharged to the industrial wastewater and further neutralized if needed.
3. Contributing scenario controlling exposure of workers	
Product characteristics.	Concentration up to 100%.
Use frequency.	8 hours / day, 200 days/year.
Technical conditions and measures at the source in order to prevent releases.	Replace manual procedures with automatic procedures where possible. Use closed systems or opened systems with coverage. Use aspiration pumps.
Technical conditions and measures in order to control dispersion from source toward worker.	Adopt general ventilation.
Organizational measures in order to prevent/limit releases, dispersions and exposure.	The employer has to ascertain that the required PPE are available for workers. For the product transfer use pumps in order to avoid splashes.
Conditions and measures related to personal protection, hygiene and health evaluation.	Protection of airways: in case of aerosols use a respiratory protection with approved filter P2. Hands protection: gloves in PVC, neoprene lined with natural rubber, butyl rubber, material thickness: 0,5 mm, permeation time: > 480 min. Eyes protection: wear tightly fitting safety goggles, face-shield. Skin protection: wear suitable protective clothing, aprons, shield and suits, rubber or plastic boots.