ALI S.p.A.

SAFETY DATA SHEET Regulation (UE) 2015/830

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURES AND THE COMPANY

1.1 PRODUCT NAME: **COMBICLEAN**

1.2 USE OF SUBSTANCE/PREPARATION: Alkaline detergent for cleaning industrial furnaces

1.3 COMPANY IDENTIFICATION:
ALI S.p.A.
VIA SCHIAPARELLI, 15
31029 VITTORIO VENETO (TV) ITALY
tel. +39 0438 9110
Contact person / contact e-mail : lainox@lainox.it

1.4 EMERGENCY TELEPHONE : Tel.: +

2. HAZARDS IDENTIFICATION

2.1 SUBSTANCE/MIXTURE CLASSIFICATION

Classification by Regulation No 1272/2008 and subsequent amendments and adjustments

Indication of danger	Categories
H290	Met. Corr. 1
H314	Skin Corr. 1B

The full text of the indications of danger is listed in item 16.

2.2 LABELLING ELEMENTS

Warnings: Danger

Pictograms

Hazard and Precautionary statements
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
P260 Do not breathe dust / fume / gas / mist / vapors / spray.
P264 Wash hands thoroughly after use.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. DO NOT induce vomiting.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove the any contact lenses if easy to do. Continue rinsing.
P303 + P361 + P353 IF ON SKIN (or hair): Remove all clothing contaminated. Rinse skin with water / shower.

It Contains: Anhydrous sodium hydroxide

2.3 OTHER HAZARDS: When you catch fire can form harmful products such as: CO_x , NO_x , SO_x
VPvB Substances: None - PBT Substances: None

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 CHEMICAL COMPOSITION: Preparation based on sodium hydroxide in aqueous solution

3.2 COMPONENTS: Substances hazardous to health in accordance with Regulation No 1272/2008 as modified, for which there are recognized exposure limits:

COMPONENT	COD. REACH	CAS. No.	EINECS or ELINCS	CONCENTRATION % BY WEIGHT	WARNINGS	CATEGORY OF HAZARD	PICTOGRAPH
Anhydrous sodium hydroxide	-	1310-73-2	215-185-5	14	H290 H314	Met. Corr. 1 Skin Corr. 1B	
Carboxylic acid of ether alcilic	-	polymers	-	1.2	H315 H318	Skin Irrit. 2 Eye Dam. 1	

The complete text of warning is specified in section 16.

4. FIRST AID MEASURES

4.1 DESCRIPTION FIRST AID MEASURES
Skin contact: Take off immediately all contaminated clothing. Wash skin with soap and water thoroughly. If irritation persists, get medical help. Wash contaminated clothing before reuse.

Eye contact: Wash thoroughly and immediately with running water, or suitable eyewash. Consult a doctor.

Inhalation: Remove affected person in a clean environment. And artificial respiration if necessary. Get medical attention.

Ingestion: Get immediate medical attention. Show this safety data sheet to the doctor. Call a poison control center.

4.2 IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
See Chapter 11

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED
Consult a doctor and follow the directions given

5. FIRE-FIGHTING MEASURES

5.1 SUITABLE EXTINGUISHING AGENTS:

WATER SPRAY	yes	CARBON DIOXIDE	yes
SAND, SOIL or FOAM	yes	DRY POWDER	yes

DO NOT USE: WATER JETS.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE
Do not breathe the substances released during combustion.

5.3 ADVICE FOR FIREFIGHTERS

Keep public away, wear protective clothing (helmet with visor, fireproof clothing including breathing apparatus). Keep drums and packaging not yet on fire by spraying water..

6. ACCIDENTAL RELEASE MEASURES

6.1 PRECAUTIONS: Avoid exposure to skin and eyes by wearing appropriate protective clothing. Avoid inhalation of vapors or dusts, wear a protective mask.

6.2 ENVIRONMENTAL PRECAUTIONS: Keep spilled product by diking with sand, earth, absorbent products away from drains, surface water and groundwater and soil, possibly to alert the neighborhood.

Notify the local authorities (police, fire brigade) if the product is accidentally penetrated the sewer. Waste disposal must be in place authorized in compliance with applicable laws.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: : Absorb with sawdust, diatomaceous earth or absorbent material. Wash with water.

6.4 **REFERENCES TO OTHER SECTIONS:** See Section 13
.

7. HANDLING AND STORAGE

7.1 PERSONAL PRECAUTIONS FOR SAFE HANDLING: Wear appropriate personal clothing. Avoid contact with skin and eyes by using proper protective equipment. Take the usual industrial hygiene. Ventilate the work environment. Do not eat, drink or smoke in areas of handling and processing.

7.2 CONDITIONS FOR SAFE STORAGE INCLUDING ANY INCOMPATIBILITIES; Keep the containers tightly closed. Keep the room ventilated.

7.3 SPECIAL USES: Information not available

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 EXPOSURE LIMIT VALUES:
limit values for occupational exposure
SODIUM HYDROXIDE ; CAS: 1310-73-2
Limit value type (country of
provenance): TLV / TWA (EC)
limit value: 2 mg / m3
Registration: ACGIH
version:
Values DNEL / DMEL and PNEC
DNEL / DMEL
Limit value type: Consumer DNEL (local) (Sodium hydroxide; CAS: 1310-73-2)
Route of Exposure: Inhalation
Exposure frequency: Long-term (repeated)
limit value: 1 mg / m3
Limit value type: DNEL worker (local) (Sodium hydroxide; CAS: 1310-73-2)
Route of Exposure: Inhalation
Exposure frequency: Long-term (repeated)
limit value: 1 mg / m3

8.2 EXPOSURE CONTROLS: Provide adequate ventilation. It must be ensured a good ventilation and air exchange. If these measures are not sufficient to maintain the concentration of particles and vapors below the limit of personal exposure, it is necessary to use appropriate respiratory equipment.

8.2.1 OCCUPATIONAL EXPOSURE CONTROLS:

a) RESPIRATORY PROTECTION: If vapors, aerosols and powders include the need for appropriate protective equipment such as breathing masks with organic vapor filters. If a concentration less than 17% oxygen, use breathing apparatus.

b) HAND PROTECTION: Wear gloves, a Class I (EN 374)

c) EYE PROTECTION: Goggles or face shield.

d) SKIN PROTECTION: Use long-sleeved aprons. boots and protective clothing for Category I

	gr/l	
Organic composts VOC	data not available	data not available
Volatile Organic carbon	data not available	data not available
Emission in atmosphere	data not available	data not available

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 PHYSICAL STATE	liquid
9.2 SOLUBILITY IN WATER	dispersible
9.3 SOLUBILITY IN ORGANIC SOLVENT	data not available
9.4 BOILING POINT	~100 °C
9.5 FREEZING POINT	data not available
9.6 pH 10% WATER SOLUTION	11-13
9.7 RELATIVE DENSITY AT 20°C	data not available
9.8 VAPOUR PRESSURE AT 20 °C	data not available
9.9 FLAMMABILITY	data not available
9.10 FLASH POINT	data not available
9.11 EXPLOSIVE PROPERTIES	data not available
9.10 PROPERTIES ;EXPLOSIVE	data not available
9.12 OXIDIZING PROPERTIES	data not available
9.13 VISCOSITY	data not available
9.14 PARTITION COEFFICIENT n-octanol / water	data not available
9.15 VAPOUR DENSITY	data not available
9.16 COLOR	yellow
9.17 ODOUR	data not available
9.18 THRESHOLD ODOUR	data not available
9.19 DISTILLATION RANGE	data not available
9.20 EVAPORATION RATE	data not available
9.21 LOWER FLAMMABILITY LIMIT	data not available
9.22 UPPER FLAMMABILITY LIMIT	data not available

9.23 LOWER EXPLOSIVE LIMIT data not available

9.24 UPPER EXPLOSIVE LIMIT data not available

9.25 DECOMPOSITION TEMPERATURE data not available

9.26 COMPOSITION OF TEMPERATURE data not available

10. STABILITY AND REACTIVITY

10.1 REACTIVITY;: Reactive with oxidizing materials, reducing agents and strong acids or bases. Stable under the recommended conditions of storage and handling. Avoid extreme temperatures.

10.2 CHEMICAL STABILITY : Stable under the recommended conditions of storage and handling. Avoid extreme temperatures

10.3 POSSIBILITY HAZARDOUS REACTION: exothermic reactions with oxidizing materials, reducing and strong acids or bases.

10.4CONDITIONS TO AVOID: High temperatures of the product.

10.5 INCOMPATIBLE MATERIALS: oxidizing materials, reducing agents and strong acids or bases.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: COx, NOx, SOx

11. TOXICOLOGICAL INFORMATION

11.1 TOXICOLOGICAL EFFECTS INFORMATION:
Toxicological information of the main substances in the mixture:

Substance	Oral LD50 (rat)	Dermal LD50	LC50 Inhalation
	d.n.d.	d.n.d.	d.n.d.
	d.n.d.	d.n.d.	d.n.d.

11.2 MORE: -

12. ECOLOGICAL INFORMATION

Use this product according to good working practices. Products does not have to be dispersed in the environment.

12.1 ECOTOXICITY ':
Acute (short-term) fish
Parameter: LC50 (SODIUM HYDROXIDE; CAS: 1310-73-2)
Species: Fish
Effective Dose: 189 mg / l
Exposure time: 48 h
Acute (short-term) daphnia toxicity
Parameter: EC50 (SODIUM HYDROXIDE; CAS: 1310-73-2)
Species: Ceriodaphnia dubia
Effective Dose: = 40.4 mg / l
Exposure time: 48 h

12.2 PERSISTENCE AND DEGRADABILITY ': data not available

12.2 MOBILITY ': data not available

12.3 PERSISTENCE AND DEGRADABILITY ': data not available

12.4 BIOACCUMULATION POTENTIAL data not available

12.5 RESULTS OF PBT AND vPvB ASSESSMENT data not available

12.6 OTHER HARMFUL EFFECTS : data not available

13. DISPOSAL CONSIDERATIONS

13.1 METHODS OF DISPOSAL: The generation of waste should be avoided or minimized wherever possible. Significant quantities of product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal. Disposal of this product must be carried all times comply with the law on environmental protection and waste disposal legislation and the requirements of any relevant local authorities.
13.2 PACKING: Special precautions: Do not dispose of this material and its container must be with proper precautions. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

	class	UN	Number of danger	symbol	packing group	EmS	MFA G	marine polluttant
RID/ADR	8	1824	80	C	II	-	-	-
ICAO/IATA	8	1824	80	C	II	-	-	-
IMO/IMDG	8	1824	80	C	II	-	-	-

UN 1824 SODIUM HYDROXIDE SOLUTION

15. REGULATORY INFORMATION

chemical safety assessment has been carried out for sodium hydroxide
Restricted substances for use as indicated in 1.2 seconds SDS ANNEX XVII EC Regulation n ° 1907/2006 with subsequent amendments: no

16. OTHER INFORMATION

Hazard statements: H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.

Information added, eliminated or modified in case of review of the card: 3

Regulation (EC) No. 1907/2006 (REACH)
Regulation (EC) No. 1272/2008 (CLP)
Regulation (EC) No. 790/2009 (ATP 1 CLP) and (EU) No. 758/2013
Regulation (EU) No. 453/2010 (Annex II)
Regulation (EU) No. 286/2011 (ATP 2 CLP)
Regulation (EU) No. 618/2012 (ATP 3 CLP)
Regulation (EU) No. 487/2013 (ATP 4 CLP)
Regulation (EU) No. 944/2013 (ATP 5 CLP)
Regulation (EU) No. 605/2014 (ATP 6 CLP)
Restrictions relating to the product or contained substances pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH) and subsequent adjustments:
Where applicable, refer to the following regulations:

Ministerial circulars 46 e 61 (Aromatic amines).
Legislative Decree no. 21 September 2005 n. 238 (Seveso Directive Ter).
Regulation 648/2004 / EC (Cleaners).
D.L. 3/4/2006 n. 152 Environmental Regulations
Provisions relating to Directives 82/501 / EC (Seveso), 96/82 / EC (Seveso II):
ADR 2015
IMDG code 2014
Niosh Registry of toxic effect of chemical substances
The Merck Idex

ADR: European Agreement concerning the international road transport of dangerous goods.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CLP: Classification, Labeling, Packaging.
DNEL: Derived no effect level.
EINECS: European Inventory of Existing Commercial Chemical Substances European
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical "International Civil Aviation Organization Instructions" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: lethal dose for 50 percent of test population.
LTE: long-term exposure.
PNEC: Predicted No Effect Concentration.
RID: Regulation Concerning the International Carriage of Dangerous Goods by Rail.
STE: Short term exposure.
STEL: Short Term Exposure Limit.
STOT: Specific Target Organ Toxicity.
TLV: TLV.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hours. (ACGIH Standard).
WGK: Water Hazard Class (Germany).

FOR FURTHER INFORMATION CONTACT ALI S.p.A.

The information contained in the present sheet are based on our own knowledge on the date of the last versions.
User must verify the suitability and thoroughness of provided information according to each specific use of the product.
ALI S.p.A. does not assume any responsibility for uses not in accordance with our suggestions.
Present instructions represent safety norms and emergency actions, therefore they cannot be intended as quality specification

SHOW OF EXPOSURE SODIUM HYDROXIDE

1. Short title of the exposure scenary: Professional use	
sector of use (SU).	SU 22
chemical product category (PER).	PC35
Process categories (PROC).	PROC19

Release Category (ERC).	ERC8a
2. Contributing scenary contributes to environmental exposure control	
Product features.	It covers concentrations up to 100%
Frequency and duration of use.	continuous exposure
Technical and specific conditions in place to reduce or limit discharges, air emissions and discharges to the ground.	And a regular pH control 'required in the case of discharges to open water. In general discharges should occur so as to minimize changes to the pH of the receiving surface water. In general most aquatic organisms can tolerate pH values in the range 6-9, as also reported in the description of standard OECD tests on aquatic organisms. The risk management measures for the environment are designed to prevent the discharge into municipal sewer or in surface water, in case such discharges are likely to cause significant changes in pH.
Conditions and measures related to external treatment of waste for disposal.	The waste should be reused or sent to industrial waste water and neutralized, if necessary
3. Contributing scenary controlling worker exposure	
Product features.	It covers concentrations up to 100%
Frequency and duration of use.	8 hours / day, 200 days / year.
Technical conditions and measures at process level (source) to prevent release.	Replace manual procedures with automated procedures if possible. Use closed systems or open covered. Use suction pumps.
Technical conditions and measures to control dispersion from the source to the worker.	Good idea to take ventilation
Organisational measures to prevent / limit releases, dispersion and exposure.	The employer must ensure that the required PPE is available to workers. For the transfer of the product to use suction pumps to prevent the formation of splashes.
Conditions and measures related to personal protection, hygiene and health evaluation	Respiratory protection: in case of aerosol formation use respiratory protection with approved filter P2. Hand protection: PVC gloves, neoprene with latex coating, butyl rubber, material thickness: 0.5 mm; breakthrough time:> 480 min. Eye protection: protective shields, goggles resistant to chemicals adherents. Skin protection: Wear suitable protective clothing, aprons, masks and suits, rubber or plastic boots The employer must ensure that the required PPE is available to workers. For the transfer of the product to use suction pumps to prevent the formation of splashes..