Safety Data Sheet

According to 1907/2006 (REACH) Article 31,
2015/830/EU and 1272/2008/EC
Date: 30.09.2017 – Version A

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier:

COB FLEX

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

Liquid acid descaler

1.3 Details of the supplier of the safety data sheet:

COBART CHEMICALS
BARBOUNAKIS SA
Samou 27, 163 42 ILIOUPOLI, ATHENS
Tel.: (+30) 210.9954953 - 210.99629355, Fax: (+30) 210.9962356
e-mail: info@cobart.gr

1.4 Emergency telephone number:

Hellenic Poison Centre Tel.:	**(+30) 210.7793777**
European Emergency Tel.:	**112**

Supplier's emergency telephone number:

Calls from 08:00 to 16:00:	(+30) 210.9954953

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.

Regulation 1272/2008 (CLP) and following amendments and adjustments:

Hazard classification and indication:

Substance or mixture corrosive to metals, category 1	H290
Skin corrosion, category 1A	H314

2.2 Label elements:

Hazard labeling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements:

Hazard pictograms:

GHS05

Signal words: **DANGER**

Hazard statements:

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
EUH071	Corrosive to the respiratory tract.

Precautionary statements:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

P260	Do not breathe gas/mist/spray.
P264	Wash hands thoroughly after handling.
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): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
P405	Store locked up.
P501	Dispose of contents/container according to national/European laws.
Contains:	Nitric acid.

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%.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:
Information not relevant.

3.2 Mixtures:
Contains:

Identification	Conc. %.	Classification 1272/2008 (CLP)
Nitric acid		
CAS. 7697-37-2 CE. 231-714-2 INDEX. 007-004-00-1 Reg. no. 01-2119487297-23-0054	> 10	Ox. Liq. 2 H272, Skin Corr. 1A H314, EUH071, Note B

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

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 authorized 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:
Specific information on symptoms and effects caused by the product are unknown. For symptoms and effects caused by the contained substances, see section 11.

4.3 Indication of any immediate medical attention and special treatment needed:
Information not available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media:
SUITABLE EXTINGUISHING EQUIPMENT
Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapors and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2 Special hazards arising from the substance or mixture:
HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
If large quantities of the product are involved in a fire, they can make it considerably worse. Do not breathe combustion products.

5.3 Advice for firefighters:
GENERAL INFORMATION
In the case of fire, use jets of water to cool the containers to prevent the risk of explosions (product decomposition and excess pressure) and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Remove all containers containing the product from the fire, if it is safe to do so.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal firefighting 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).

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 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. If the product is flammable, use explosion-proof equipment. 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. Contaminated material should be disposed of in compliance with the provisions set forth in section 13.

6.4 Reference to other sections:
Any information on personal protection and disposal is given in sections 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:
Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapors or mists. Do not eat, drink or smoke during use. Wash hands after use. 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 ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

7.3 Specific end use(s):
Information not available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

NITRIC ACID
Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm
WEL	GBR			2.6	1
TLV	GRC			2.6	1
OEL	EU			2.6	1
TLV-ACGIH		5.2	2	10.3	4

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.

8.2.1 *Eye protection:*

Wear airtight protective goggles (see standard EN 166).

8.2.2 *Skin protection:*

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.

Other skin protection:

Wear category II 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.

8.2.3 *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 vapors of various kinds and/or gases or vapors 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 odorless 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.

8.2.4 *Environmental exposure controls:*

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

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:	Liquid
Color:	Transparent
Odor:	Characteristic
pH (solution):	<1.5
Flash point:	>60°C
Density:	N/A
Viscosity:	N/A
Solubility:	In the water

9.2 Other informations:

VOC (Directive 2010/75/EC):	0 %
VOC (volatile carbon):	0 %

10. STABILITY AND REACTIVITY

10.1 Reactivity:
NITRIC ACID
Decomposes at 84°C/183°F.Possibility of self-ignition.

10.2 Chemical stability:
Information not available.

10.3 Possibility of hazardous reactions:
The product may react violently with water.

10.4 Conditions to avoid:
Avoid overheating. Prevent moisture or water from penetrating inside the containers.
NITRIC ACID
Avoid exposure to: heat, light.

10.5 Incompatible materials:
NITRIC ACID
Incompatible with: flammable substances, reducing substances, alcohol, metals, basic substances, acetone, acetic acid, acetic anhydride. Incompatible materials: plastic materials.

10.6 Hazardous decomposition products:
NITRIC ACID
May develop nitric oxide.

11. TOXICOLOGICAL INFORMATION

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.

11.1 Information on toxicological effects:

Metabolism, toxicokinetics, mechanism of action and other information
Information not available
Information on likely routes of exposure
Information not available
Delayed and immediate effects as well as chronic effects from short and long-term exposure
Information not available
Interactive effects
Information not available

ACUTE TOXICITY.

LC_{50} (Inhalation) of the mixture: Not classified (no significant component).
LD_{50} (Oral) of the mixture: Not classified (no significant component).
LD_{50} (Dermal) of the mixture: Not classified (no significant component).

Corrosive to the respiratory tract

NITRIC ACID
LC_{50} (Inhalation). 67ppm(NO_2)/4h

SKIN CORROSION / IRRITATION.
Corrosive for the skin
SERIOUS EYE DAMAGE / IRRITATION.
Causes serious eye damage.

RESPIRATORY OR SKIN SENSITISATION.
Does not meet the classification criteria for this hazard class.
GERM CELL MUTAGENICITY.
Does not meet the classification criteria for this hazard class.
CARCINOGENICITY.
Does not meet the classification criteria for this hazard class.
REPRODUCTIVE TOXICITY.
Does not meet the classification criteria for this hazard class.
STOT - SINGLE EXPOSURE.
Does not meet the classification criteria for this hazard class.
STOT - REPEATED EXPOSURE.
Does not meet the classification criteria for this hazard class.
ASPIRATION HAZARD.
Does not meet the classification criteria for this hazard class.

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.

12.2 Persistence and degradability:
NITRIC ACID

Solubility in water.	> 1000000 mg/l
Degradability.	information not available

12.3 Bioaccumulative potential:
NITRIC ACID

Partition coefficient: n-octanol/water.	< 3

12.4 Mobility in soil:
Information not available.

12.5 Results of PBT and vPvB assessment:
Based on 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.

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.
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.

14. TRANSPORT INFORMATION

14.1 UN number:
ADR / RID, IMDG, IATA: **3264**

14.2 UN proper shipping name:
ADR / RID: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID)

IMDG: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID)
IATA: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID)

14.3 Transport hazard class(es):

ADR / RID:	Class: 8	Label: 8	
IMDG:	Class: 8	Label: 8	
IATA:	Class: 8	Label: 8	

14.4 Packing group:
ADR / RID, IMDG, IATA: II

14.5 Environmental hazards:
ADR / RID: NO
IMDG: NO
IATA: NO

14.6 Special precautions for user:

ADR / RID:	HIN - Kemler: 80	Limited Quantities 1 L	Tunnel restriction code (E)
	Special Provision: -		
IMDG:	EMS: F-A, S-B	Limited Quantities 1 L	
IATA:	Cargo:	Maximum quantity: 30 L	Packaging instructions: 855
	Pass.:	Maximum quantity: 1 L	Packaging instructions: 851
	Special Instructions:	A3, A803	

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:
Information not relevant.

15. REGULATORY INFORMATION

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

Seveso Category - Directive 2012/18/EC**: None**

Substances in Candidate List (Art. 59 REACH).
Based on available data, the product does not contain any SVHC in percentage greater than 0.1%.

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.

Regulation (EC) No. 648/2004.
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

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

16. OTHER INFORMATION

Publisher of Safety Data Sheet:

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Quality Assurance and Control Systems
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Website: www.qacslab.com

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

Ox. Liq. 2	Oxidising liquid, category 2.
Ox. Liq. 3	Oxidising liquid, category 3.
Met. Corr. 1	Substance or mixture corrosive to metals, category 1.
Skin Corr. 1A	Skin corrosion, category 1A.
Skin Corr. 1B	Skin corrosion, category 1B.
H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
EUH071	Corrosive to the respiratory tract.

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. Regulation (EU) 1907/2006 (REACH) of the European Parliament

2. Regulation (EC) 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
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. The Merck Index. - 10th Edition
13. Handling Chemical Safety
14. Niosh - Registry of toxic effects of chemical substances
15. INRS - Fiche Toxicologique (toxicological sheet)
16. Patty - Industrial Hygiene and Toxicology
17. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
18. Ιστοσελίδα Web Agenzia ECHA

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:
Initial version.