



SAFETY DATA SHEET

In compliance with EC Regulations No.: 1907/2006, 830/2015 and 1272/2008 (CLP).

Date last modified: 03 April 2019 - Version 7.0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

1.1 Product Identifier

Product Name: **BUFFERSOL**

Product Code #: 833033 (30 lt)/832134 (210 lt)

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

Intended Use: Industrial applications; Cleaning agent for machinery, equipment & cargo holds and tanks.

Uses advised against: This product is not recommended for any industrial, professional or consumer use other than the Intended Uses above and the instructions written in this Safety Data Sheet.

1.3 Details of the supplier of the safety data sheet

Company/undertaking identification

Supplier/Manufacturer:

Marichem Marigases Hellas SA

Sfaktirias 64,

185 45 Piraeus,

Greece

Tel. No.: ++30 210 4148800

Fax No.: ++30 210 4133985

<http://www.marichem-marigases.com>

e-mail: mail@marichem-marigases.com

1.4 Emergency telephone number

Tel. No.: ++30 210 4148800 (including working hours)

Emergency Information:

Inside U.S. and Canada: (800)-424-9300 (CHEMTREC)

Outside U.S. and Canada: 1-703-527-3887 (CHEMTREC)

National Emergency Centre (Greece): ++30 210 7793777

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture

Classification under EC 1272/2008 regulation - GHS classification.

Serious Eye Damage / Eye Irritation: Eye Irrit. 2

SIGNAL WORD: WARNING



Hazard Statement(s):

H319: Causes serious eye irritation.

2.2 Label Elements

Labelling according to Regulation (EC) No. 1272/2008.

The substance is classified and labelled according to the CLP Regulation.

Hazard Pictograms



GHS07

Signal Word: WARNING

Hazard Statements

H319: Causes serious eye irritation.

Precautionary Statements

Response:

P305 + P351 + P338: IF IN THE EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do; continue rinsing.

Product classification and labelling according to Directive 67/548/EEC, European Dangerous Preparations Directive (1999/45/EC), European Regulation 648/2004 and their amendments.

No special labeling information is required; the product is not dangerous according to EC directive 99/45/EC.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Composition:

Ingredients	CAS Number	Proportion	Hazard Code(s)*
Citric Acid	5949-29-1	1-10%	H319
Other ingredients that do not contribute to the classification of the product	-	90-99%	-

*See section 16 for the full text of the Hazard Code(s) declared above.

Occupational Exposure Limits, if available, are listed in section 8.

4. FIRST AID MEASURES

4.1. Description of first aid measures

Remove contaminated clothing. If danger of loss of consciousness, place patient in recovery position and transport accordingly. Apply artificial respiration if necessary. First aid personnel should pay attention to their own safety.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Hazards: Skin resorption hazard.

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

5.2. Special hazards arising from the substance or mixture

Cool endangered containers with water-spray.

5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

6.2. Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Ensure thorough ventilation of stores and work areas.

Prevent contact with air/oxygen (formation of peroxide).

Protection against fire and explosion:

Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Contains substances with no workplace control parameters.

8.2 Exposure controls

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Respiratory protection: Wear appropriate mask.

Other information: Do not eat, drink or smoke during use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

9.1.1. Appearance

Physical State:	Liquid
Color:	Colorless
Odor:	Odorless

9.1.2. Basic data

Boiling Point Range:	<145°C
Melting Point Range:	Not available
Solubility in water:	Very soluble
Flash Point:	None
Autoignition Temperature:	None
Lower Explosion Limit (vol %):	None
Upper Explosion Limit (vol %):	None

Vapour Pressure:	61mmHg at 20°C
pH value:	5.5 at 20°C
Specific Gravity:	1.05 – 1.08 gr/cm ³ at 20°C

9.2 Other Information: No further relevant information available.

10. STABILITY AND REACTIVITY

10.1. Reactivity

None.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

Reacts with strong oxidizing agents and strong bases.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. No other special precautions other than good housekeeping of chemicals.

10.5. Incompatible materials

Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon Monoxide. Carbon Dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Name of Substance: Citric Acid

Acute Toxicity

Not classified.

LD50 oral rat: 5400 mg/kg.

Skin corrosion/irritation

Not classified.

pH: 1.7 10% solution.

Serious eye damage/irritation

Causes serious eye irritation.

pH: 1.7 10% solution.

Respiratory or skin sensitisation

Not classified.

Germ cell mutagenicity

Not classified. Based on available data, the classification criteria are not met.

Carcinogenicity

Not classified.

Reproductive toxicity

Not classified. Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not classified.

Specific target organ toxicity (repeated exposure)

Not classified. Based on available data, the classification criteria are not met.

Aspiration hazard

Not classified. Based on available data, the classification criteria are not met.

Potential Adverse human health effects and symptoms

Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation

May cause respiratory irritation.

Symptoms/injuries after skin contact

Slight irritation.

Symptoms/injuries after eye contact

Causes serious eye irritation.

Symptoms/injuries after ingestion

Nausea.

Chronic symptoms

Affection/discolouration of the teeth.

12. ECOLOGICAL INFORMATION

Name of Substance: Citric Acid**12.1 Toxicity**

LC50 fishes 1: 440 mg/l

EC50 Daphnia 1: 1534 mg/l

12.2 Persistence and Degradability

Not established.

12.3 Bioaccumulative potential

Not established.

12.4 Mobility in soil

No additional information available.

12.5 Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

This substance is not in Annex I of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

Avoid release to the environment.

The product is not harmful to the marine environment as per paragraphs 1.7.4 and 1.7.5. of Resolution MEPC. 219 (63) /Annex 24 - 2012 adoption of IMO's MARPOL Annex V.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

14. TRANSPORT INFORMATION

14.1 Not classified as dangerous material according to US DOT, IMDG, ADR/RID and IATA/ICAO codes.

15. REGULATORY INFORMATION

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

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2 Chemical Safety Assessment

A CSA does not need to be carried out for this product.

16. OTHER INFORMATION

16.1 Full text of H code(s) referred in Section 3

H319: Causes serious eye irritation.

16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail).

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

bw: Body weight.

Carc.: Carcinogenicity.

CAS number: Chemical Abstracts Service number.

CLP: Classification Labelling Packaging Regulation.

CSA: Chemical Safety Assessment.

CSR: Chemical Safety Report.

DNEL: Derived No Effect Level.

dw: Dry weight.

EC number: EINECS and ELINCS number.

EC: European Commission.

EC50: Half maximal effective concentration.

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

EmS: Emergency Schedule.

ERC: Environmental Release Category.

ES: Exposure scenario.

food: oral feed.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

Irrit.: Irritation.

LC50: Lethal concentration, 50 %.

LD50: Median Lethal dose.

LOAEC: Lowest Observed Adverse Effect Concentration.

LOAEL: Lowest Observed Adverse Effect Level.

MK value: Maximum Concentration value.

NCO: An international corporation that provides customer service contracting.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level.

NOEC: No Observed Effect Concentration.

OECD: Organisation for Economic Cooperation and Development.

PBT: Persistent, Bioaccumulative and Toxic.

PNEC: Predicted No Effect Concentration.

PROC: Process category.

REACH: The Registration, Evaluation, Authorisation and Restriction of Chemicals.

Resp.: Respiratory.

Sens.: Sensitization.

STEL value: Short Term Exposure Limit value.

STOT RE: Specific target organ toxicity — repeated exposure.

STOT SE: Specific target organ toxicity — single exposure.

STOT: Specific Target Organ Toxicity.

STP: Sewage Treatment Plant.

SU: Sector of use.

Tox.: Toxicity.

TWA value: Time Weighted Average value.
vPvB: Very Persistent and Very Bioaccumulative.

16.3 Notice to reader

All information, instructions and statements contained in this Material Safety Data Sheet are compiled in accordance with European Directives, corresponding national legislation and on the basis of information given by our suppliers.

The information disclosed in this Material Safety Data Sheet (which supersedes all previous versions) is believed to be correct, at the date of issue, to the best of our current knowledge and experience. It only relates to the specific product designated herein and it may not be valid when said product is used in combination with any other products or in any processed form, unless specified in the text. This document aims to provide the necessary health and safety information of the product and is not to be considered a warranty or quality specification. It is the responsibility of the recipient of this Material Safety Data Sheet to ensure that information given here is read and understood by all who use, handle, dispose of or in any way come in contact with the product.

Also, it is the responsibility of the user to comply with local legislation relating to safety, health, environment and waste management. Data and information provided concerning the product are informative, exclusively presented to the customer.