



SAFETY DATA SHEET

In compliance with EC Regulations No.: 1907/2006 and 453/2010.

Date last modified: 03 December 2014 - Version 4.0

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

1.1 Product Identifier

Product Name: OXYCONTROL

Product Code #: 673008 (30 lt)

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

Intended Use: Industrial applications; Boiler Water Treatment.

Uses advised against: This product is not recommended for any industrial, professional or consumer use other than the Intended Uses above.

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 COMPOSITION/INFORMATION ON INGREDIENTS

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]
No need for classification according to GHS criteria for this product.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]
The product does not require a hazard warning label in accordance with GHS criteria.

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 required according to EU Directives.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Composition:

Ingredients	CAS Number	Proportion	Classification*
Sodium Sulphite	7757-83-7	10% - 30%	Skin Corr. 1B; H314.
Ingredients that do not contribute to the classification of the product	-	70% - 90%	-

*See section 16 for the full text of Hazard Codes 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 inhaled: If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

On skin contact: Wash thoroughly with soap and water.

On contact with eyes: Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion: Rinse mouth and then drink plenty of water.

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

Symptoms: allergic symptoms

Hazards: Risk of sulfur dioxide formation by reaction with gastric acid after swallowing.

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 in copious quantities, dry powder, foam

5.2. Special hazards arising from the substance or mixture

Sulphur Dioxide

The substances/groups of substances mentioned can be released if the product is involved in a fire.

5.3. Advice for fire-fighters

Special protective equipment: Wear a self-contained breathing apparatus.

Further information:

Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

6.2. Environmental precautions

Do not empty into drains.

6.3. Methods and material for containment and cleaning up

For small amounts: Sweep/shovel up. Dispose of absorbed material in accordance with regulations.

For large amounts: Sweep/shovel up. 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

Protection against fire and explosion:

The substance/product is non-combustible.

7.2. Conditions for safe storage, including any incompatibilities

Segregate from acids and acid forming substances. Segregate from oxidants.

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

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS

8.1. Control parameters

Components with occupational exposure limits

PNEC

freshwater: 1.33 mg/l

marine water: 0.13 mg/l

STP: 99.9 mg/l

DNEL

worker:

Long-term exposure- systemic effects, Inhalation: 298 mg/m³

consumer:

Long-term exposure- systemic effects, oral: 11 mg/kg

consumer:

Long-term exposure- systemic effects, Inhalation: 88 mg/m³

8.2. Exposure controls

Personal protective equipment

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

polyvinylchloride (PVC) - 0.7 mm coating thickness

nitrile rubber (NBR) - 0.4 mm coating thickness

chloroprene rubber (CR) - 0.5 mm coating thickness

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Ventilation

Adequate ventilation should be provided in case of the presence of Sulfur Dioxide gas.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

9.1.1. Appearance

Physical State:	Liquid
Color:	Clear, Colorless
Odor:	Odorless

9.1.2. Basic data

Boiling Point Range:	> 100°C
Melting Point Range:	<0°C
Solubility in water:	Soluble
Flash Point:	None
Autoignition Temperature:	Not Available
Lower Explosion Limit (vol %):	None
Upper Explosion Limit (vol %):	None
Vapour Pressure:	Not Available
Relative vapor density (air=1):	Not Available
Specific Gravity (gr/cm³):	1.1 at 15° C
pH	10
9.2 Other Information:	No further relevant information available.

10. STABILITY AND REACTIVITY

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Reacts with oxidizing agents. Reacts with acids. Reacts with nitrites.

10.4. Conditions to avoid

Avoid moisture. Avoid atmospheric Oxygen.

10.5. Incompatible materials

Substances to avoid:

acids, oxidizing agents, nitrites, nitrates.

10.6. Hazardous decomposition products

Hazardous decomposition products:

Sulphur Dioxide.

11. TOXICOLOGICAL INFORMATION

Name of Substance: Sodium Sulphite

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Of low toxicity after single ingestion. Virtually non-toxic by inhalation. Virtually non-toxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): approx. 2,610 mg/kg (OECD Guideline 401)

LC50 rat (by inhalation): > 5.5 mg/l 4 h (OECD Guideline 403)

No mortality was observed. Tested as dust aerosol.

LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)

No mortality was observed.

Irritation

Assessment of irritating effects:

Not irritating to eyes and skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (Draize test)

Serious eye damage/irritation rabbit: non-irritant (Draize test)

Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:

Mouse Local Lymph Node Assay (LLNA) mouse: Non-sensitizing. (OECD Guideline 429)

Germ cell mutagenicity

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. The substance was not mutagenic in a test with mammals.

Carcinogenicity

Assessment of carcinogenicity:

No data available concerning carcinogenic effects. The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The chemical structure does not suggest a specific alert for such an effect.

Developmental toxicity

Assessment of teratogenicity:

No data available. The chemical structure does not suggest a specific alert for such an effect.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Repeated oral uptake of the substance did not cause substance-related effects. Repeated inhalative uptake of the substance did not cause substance-related effects. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aspiration hazard

Not applicable.

12. ECOLOGICAL INFORMATION

Name of Substance: Sodium Sulphite

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:

LC50 (96 h) 316 mg/l, *Leuciscus idus* (DIN 38412 Part 15, static)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates:

EC50 (48 h) 59 mg/l, *Daphnia magna* (Directive 79/831/EEC, static)

The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic plants:

EC50 (72 h) 31.9 mg/l (growth rate), *Scenedesmus subspicatus* (OECD Guideline 201, static)

The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Microorganisms/Effect on activated sludge:

EC50 (3 h) > 1,000 mg/l, (OECD Guideline 209, static)

The details of the toxic effect relate to the nominal concentration.

EC10 (17 h) 260 mg/l, *Pseudomonas putida* (DIN 38412 Part 8, aquatic)

Nominal concentration.

Chronic toxicity to fish:

No observed effect concentration (34 d) 316 mg/l, *Brachydanio rerio* (OECD Guideline 210, Flow through.)

The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d) > 10 mg/l, *Daphnia magna* (OECD Guideline 211, semistatic)

The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Assessment of terrestrial toxicity:

Study scientifically not justified.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):

Inorganic product which cannot be eliminated from water by biological purification processes.

Assessment of stability in water:

According to structural properties, hydrolysis is not expected/probable.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

Significant accumulation in organisms is not to be expected.

Bioaccumulation potential:

Study scientifically not justified.

12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption to solid soil phase is not expected.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative). Self classification.

12.6. Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.7. Additional information

Other ecotoxicological advice:

Higher concentrations of the substance may cause a strong chemical oxygen consumption in biological sewage-treatment plants and/or waterways. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

13. DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Contact manufacturer regarding recycling.

Contact waste centre regarding recycling.

Must be disposed of by special means, e.g. suitable dumping after chemical/physical pre-treatment (consolidation).

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 for the transportation according to UN, ADR/RID, IMDG, IATA/ICAO and US DOT transportation 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 has been carried out for the raw materials in this product, from the raw materials manufacturers (when needed to be carried out).

16. OTHER INFORMATION

16.1 Full text of Hazard Code(s) referred in Section 3

H314: Causes severe skin burns and eye damage.

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.