



MARIGASES

SERVICES



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

Date last modified: 22 January 2018 - Version 5.0

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

1.1 Product Identifier

Product Name: <u>CLOG - CONTROL</u> Product Code #: 673014 (30 ltrs)

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

Intended Use: Industrial applications; Sea Water Treatment.

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

<u>1.4 Emergency telephone number</u>

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.

Acute toxicity (Oral): Category 4 Skin corrosion: Category 2 Serious eye damage: Category 1 Specific target organ toxicity - repeated exposure: Category 2 (Kidney)

SIGNAL WORD: DANGER



Hazard Statement(s):

H302: Harmful if swallowed.H315: Causes skin irritation.H318: Causes serious eye damage.H373: May cause damage to organs (Kidney) through prolonged or repeated exposure.

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



Signal Word: DANGER

Hazard Statements

H302: Harmful if swallowed.H315: Causes skin irritation.H318:Causes serious eye damage.H373: May cause damage to organs (Kidney) through prolonged or repeated exposure.

Precautionary Statement

Prevention

P260: Do not breathe dust/fume/gas/mist/vapours/spray. P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

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

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

P308 + P310: IF exposed or concerned: Immediately call a POISON CENTER or doctor/physician.

Disposal:

P501: Dispose of contents/container to hazardous or special waste collection point.

2.3 Other hazards

PBT Substances: None

P Substances: None

Other Hazards No other hazards.

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

Symbol: Xi, Irritant



Risk (**R**) - **Phrases**

R36/37/38: Irritating to eyes, respiratory system and skin.

Safety (S) - Phrases

S2: Keep out of the reach of children.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical Composition:

Ingredients	CAS Number	Proportion	Hazard Code9(s)*
Dodecyl Dipropylenetriamine	2372-82-9	1% - 12%	H301; H314; H318;
			H373.
Ingredients that do not contribute to the classification of the product	-	88% - 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

General advice: Immediate medical attention is required. Move out of dangerous area. Show this safety data sheet to the doctor in attendance.

Inhalation: If breathed in, move person into fresh air. Consult a physician after significant exposure.

Skin contact: Take off contaminated clothing and shoes immediately. Rinse immediately with plenty of water. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

Eye contact: Rinse with plenty of water. Get medical attention immediately. Continue to rinse during transport. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. Small amounts splashed into eyes can cause irreversible tissue damage and blindness.

Ingestion: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Take victim immediately to hospital. Do not induce vomiting! May cause chemical burns in mouth and throat.

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

Notes to physician Symptoms: No information available. Risks: No information available. Treatment: No information available.

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

Never give anything by mouth to an unconscious person. Take victim immediately to hospital. Do not induce vomiting! May cause chemical burns in mouth and throat.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Non flammable product. Use extinguishing media appropriate for surrounding fire (e.g. water spray, fog or mist, foam, powder, Carbon Dioxide).

5.2. Special hazards arising from the substance or mixture

No typical hazardous decomposition products known.

5.3. Advice for fire-fighters

Treat as an oil fire. Water spray may be ineffective unless used by experienced fire fighters. Wear 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

Wear protective equipment to prevent skin and eye contamination and inhalation of vapour. Use adequate general or local exhaust ventilation to keep exposure levels below the recommended exposure standard. See also Section 8.

6.2. Environmental precautions

Prevent from entering drains, sewers, streams or other bodies of water. If contamination of sewers or waterways has occurred, advise the local emergency services. Dispose of this material and its container at hazardous or special waste collection point.

6.3. Methods and material for containment and cleaning up

Recover spill if possible. Absorb with sand, earth or other absorbent material. Collect and place in suitably labelled containers for disposal according to local regulations. Cover the remainder with inert absorbent for disposal.

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

Avoid contact with eye, skin or clothing. Avoid breathing vapors. Do not taste or swallow. Do not eat, drink or smoke in work area. Any clothing or shoes, which become contaminated, should be removed immediately and thoroughly laundered before wearing again.

7.2. Conditions for safe storage, including any incompatibilities

Store material in labeled sealed containers in a cool, dry and well ventilated area, separated from incompatible materials (see section 10) and sources of ignition and heat. To maintain quality, avoid elevated temperatures.

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

8.1. Control parameters

Name of Substance: Dodecyl Dipropylenetriamine

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Name of Substance: Dodecyl Dipropylenetriamine

Engineering Controls

Provide eyewash station and safety shower. Keep solutions of 0.5% acetic acid in water at hand.

PERSONAL PROTECTION

Eye and face protection:	Wear safety glasses. Contact lenses should not be worn. Chemical goggles (tightly fitted) and face shield should be worn where splashing is a possibility.
Skin protection:	Use protective gloves made of Nitrile or butyl rubber. Use suitable protective clothing as protection against splashing or contamination. Dry clean contaminated clothes before reuse
Respiratory protection:	A self-contained breathing apparatus or air line respirator, with full face piece is required for vapour concentrations and for spills.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

9.1.1. Appearance

Physical State:	Liquid
Color:	Colorless, clear
Odor:	Slight amine like
9.1.2. Basic data	
Boiling Point Range:	>100°C at 20°C
Melting Point Range:	0°C at 20°C
Solubility in water:	Complete

Flash Point:	Not Applicable
Autoignition Temperature:	Not Available
Lower Explosion Limit (vol %):	Not Available
Upper Explosion Limit (vol %):	Not Available
Vapour Pressure:	Not Available
Relative vapor density (air=1):	Not Available
Specific Gravity (gr/cm ³):	0.99 – 1.01 at 20°C
pH value:	10.0 - 12.0
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

None known.

10.4. Conditions to avoid

Avoid elevated temperatures and direct sunlight.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

No typical hazardous decomposition products known.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Name of Substance: Dodecyl Dipropylenetriamine

Hazard Summary

Inhalation: Inhalation of aerosols may cause irritation to mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.

Skin: Symptoms may be delayed. Causes severe skin burns.

Eyes: Causes serious eye damage.

Ingestion: Harmful if swallowed. Causes burns.

Toxicology Assessment

Further information: May cause damage to organs through prolonged or repeated exposure.

Test result

Acute oral toxicity: LD50: 871 mg/kg Species: rat Method: OECD Test Guideline 401

TOXICOLOGY DATA FOR THE COMPONENTS:

Test result Component: Dodecyl Dipropylenetriamine Acute oral toxicity: LD50: > 50 - 300 mg/kg Species: rat Method: OECD Test Guideline 401

Skin irritation: Result: Causes burns.

Sensitisation: Buehler Test Species: guinea pig Result: Does not cause skin sensitisation.

Germ cell mutagenicity Genotoxicity in vitro: Ames test Result: negative

Target Organ Systemic: Target Organs: Kidney

Toxicant - Repeated exposure: May cause damage to organs through prolonged or repeated exposure.

12. ECOLOGICAL INFORMATION

Name of substance: Dodecyl Dipropylenetriamine

12.1. Toxicity

Test result Component: Dodecyl Dipropylenetriamine

Ecotoxicity effects Toxicity to fish: LC50: > 0.1 - 1 mg/l Exposure time: 96 h Species: Danio rerio (zebra fish) Method: OECD Test Guideline 203 Toxicity to daphnia and other aquatic invertebrates: EC50: > 0.01 - 0.1 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202 Toxicity to algae: EC50: > 0.01 - 0.1 mg/l Exposure time: 72 h Species: Desmodesmus subspicatus (green algae) Method: OECD Test Guideline 201 NOEC: > 0.001 - 0.01 mg/l Exposure time: 72 h Species: Selenastrum capricornutum (green algae) Method: OECD Test Guideline 201 M-Factor: 10 Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: > 0.01 - 0.1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: semi-static test Method: OECD Test Guideline 211

12.2. Persistence and degradability

Test result Elimination information (persistence and degradability) Biodegradability: The product contains only readily biodegradable substances.

Biodegradability: Result: Readily biodegradable. Method: OECD Test Guideline 301D. GLP: Yes.

12.3. Bioaccumulative potential

Bioaccumulation is unlikely.

12.4. Mobility in soil (and other compartments if available)

Immobile.

12.5. Results of PBT and vPvB assessment

Ecotoxicology Assessment

Results of PBT assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Additional ecological information:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

Ecotoxicology Assessment Component: Dodecyl Dipropylenetriamine

Results of PBT assessment: This substance is not considered to be a PBT (Persistent, Bioaccumulation, Toxic) This substance is not considered to be vPvB (very Persistent nor very Bioaccumulating).

12.6. Additional information

Biochemical Oxygen Demand (BOD): No data available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container.

Hazardous waste: Dispose of contents/container in accordance with local regulation.

Contaminated packaging: Empty remaining contents. Dispose of as unused product.

14. TRANSPORT INFORMATION

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

H301: Toxic if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes skin irritation.

H373: May cause damage to organs through prolonged or repeated exposure.

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.