



SAFETY DATA SHEET

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

Date last modified: 21 October 2019 - Version 7.0

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

1.1 Product Identifier

Product Name: FOAM PLUS

Product Code: 830543 (5 lt)/832543 (25 lt)

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

Intended Use: Industrial applications; Foaming agent.

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: category 1

SIGNAL WORD: DANGER



Hazard Statement(s):

H318 Causes serious eye damage.

2.2 Label Elements

Labelling according to GHS (1272/2008/EC)

Hazardous products which must be listed on the label: 931-291-0 -

Reaction products of 1H-Imidazole-1-ethanol, 4,5-dihydro-, 2-(C7-C17 odd-numbered, C17-unsaturated alkyl) derivatives and sodium hydroxide and chloroacetic acid.

SYMBOL:



SIGNAL WORD: DANGER

Hazard Statement(s):

H318 Causes serious eye damage.

Precautionary Statement(s):

Prevention:

P280 Wear protective gloves/ eye protection/ face protection.

Response:

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 or doctor/ physician.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Symbol: Xi



Irritant (Xi)

R-phrases: R36: Irritating to eyes.

S-phrases: S2: Keep out of the reach of children.
S25: Avoid contact with eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39: Wear eye/face protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical Composition:

Mixture

Chemical Nature: Aqueous solution - Sodium Cocoamphoacetate.

Ingredients	EC Number	Proportion	Hazard Code(s)*
Reaction products of 1H-Imidazole-1-ethanol, 4,5-dihydro-, 2-(C7-C17 odd-numbered, C17-unsatd. alkyl) derivatives and sodium hydroxide and chloroacetic acid	931-291-0	25% - 45%	H318
Components which do not contribute to the classification of the product	-	55% - 75%	-

*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

Show this safety data sheet to the doctor in attendance. First aider needs to protect himself. Place affected clothing in a sealed bag for subsequent decontamination.

Skin contact

Take off contaminated clothing and shoes immediately.
Wash off with plenty of water.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Get immediate medical advice/ attention.

Ingestion

Do NOT induce vomiting. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media: Carbon dioxide (CO₂), Multi-purpose powders, foam and water spray.

Unsuitable extinguishing media: High volume water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting:

On heating there is a risk of a build-up of pressure in hermetically sealed containers or tanks.

On combustion, toxic gases are released.

Under fire conditions:

Will burn (following evaporation of water)

On combustion or on thermal decomposition (pyrolysis) releases:

Carbon oxides.

Nitrogen oxides (NO_x).

5.3 Advice for fire-fighters

Special protective equipment for fire-fighters:

Wear self-contained breathing apparatus for fire-fighting if necessary.

Self-contained breathing apparatus (EN 133).

Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing.

For further information refer to section 8 "Exposure controls/personal protection".

Specific fire fighting methods: Cool containers / tanks with water spray.

Further information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

5.4 Other information

Hazardous Combustion Products

Possible the formation of toxic Carbon Monoxide when combustion takes place in lack of oxygen.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with the skin and the eyes.

Keep away from flames and sparks.

Remove all sources of ignition.

Ventilate the area.

Wear suitable protective clothing.

Wear suitable gloves.

Safety glasses with side-shields

Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2 Environmental precautions

Prevent product from entering sewage system.
Contain the spilled material by bunding.

6.3 Methods and materials for containment and cleaning up

Recovery

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).
Sweep up or vacuum up spillage and collect in suitable container for disposal.
Never return spills in original containers for re-use.

Decontamination/cleaning

Clean contaminated surface thoroughly.
Wash non-recoverable remainder with large amounts of water.
Recover the cleaning water for subsequent disposal.
Decontaminate tools, equipment and personal protective equipment in a segregated area.

Disposal

Dispose of in accordance with local regulations.

Methods for containment

Keep in properly labelled containers.
Keep in suitable, closed containers for disposal.

Additional advice

Material can create slippery conditions.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Technical measures

Provide adequate ventilation.

Advice on safe handling and usage

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

Hygiene measures

Use clean, well-maintained personal protection equipment.

When using do not eat, drink or smoke.
Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures for storage

Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

Storage conditions

Recommended

Keep container tightly closed and dry.
Keep in a well-ventilated place.

To be avoided

Keep away from open flames, hot surfaces and sources of ignition.

Keep away from direct sunlight.

Keep away from incompatible materials to be indicated by the manufacturer.

Incompatible products

Strong acids.

Strong oxidizing agents.

Packaging Measures

Packaging materials - Recommended: Plastic materials.

Packaging materials - To be avoided: Uncoated metals.

Storage stability

Storage temperature: 10 - 30 °C

7.3 Specific end use(s)

No data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

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Derived No Effect Level (DNEL) / Derived minimal effect level (DMEL)

Product Name	Population	Route of Exposure	Potential Health Effects	Value type	Value	Remarks
Reaction products of 1H-Imidazole-1-ethanol, 4,5-dihydro-, 2-(C7-C17 odd-numbered, C17-unsatd. alkyl) derivatives and sodium hydroxide and chloroacetic acid	Workers	Skin contact	Long-term systemic effects		6.42 mg/kg bw/day	
		Inhalation	Long-term systemic effects		4.5 mg/m ³	
	Consumers	Skin contact	Long-term systemic effects		3.85 mg/kg bw/day	
		Inhalation	Long-term systemic effects		4.06 mg/m ³	
		Ingestion	Long-term systemic effects		0.39 mg/kg bw/day	

Predicted No Effect Concentration (PNEC)

Product Name	Compartment	Value	Remarks
Reaction products of 1H-Imidazole-1-ethanol, 4,5-dihydro-, 2-(C7-C17 odd-numbered, C17-unsatd. alkyl) derivatives and sodium hydroxide and chloroacetic acid	Fresh water	5.3 µg/l	
	Marine water	0.53 µg/l	
	Fresh water sediment	20.8 µg/kg (dw)	
	Marine Sediment	2.08 µg/kg (dw)	
	Soil	1.04 µg/kg (dw)	
	STP	6.6 mg/l	

8.2 Exposure controls

Control measures

Engineering measures: Effective exhaust ventilation system. Avoid splashes.

Hand protection: Where there is a risk of contact with hands, use appropriate gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Gloves must be inspected prior to use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection: Safety glasses with side-shields.

In case of contact through splashing: Face-shield.

Skin and body protection: Protective suit impervious clothing. Footwear protecting against chemicals.

Hygiene measures: Use clean, well-maintained personal protection equipment. When using do not eat, drink or smoke. Wash hands before breaks and at the end of workday.

Protective measures: The protective equipment must be selected in accordance with current CEN standards and in cooperation with the supplier of the protective equipment. Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use. Ensure that eyewash stations and safety showers are close to the workstation location. Emergency equipment immediately accessible, with instructions for use.

Environmental exposure controls

General advice: Prevent product from entering sewage system. Contain the spilled material by bunding.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1.1. Appearance

Physical State:	Liquid
Color:	Yellow
Odor:	Odorless

9.1.2. Basic data

Boiling Point/Boiling range:	ca. 100 ⁰ C
Freezing Point:	< 1 ⁰ C
Flash Point:	Not Applicable

Autoignition Temperature:	Not Applicable
Vapour Pressure:	< 0.00001hPa at 20 ⁰ C
Partition coefficient: n-Octanol/water: log Pow:	-1 at 20 ⁰ C
Cloud Point:	<15 ⁰ C
Specific Gravity:	1.08 – 1.12 gr/cm ³ at 20 ⁰ C
Solubility:	Water solubility: Complete Ethanol solubility: Complete
Dynamic Viscosity:	<= 500 mPa.s (25 ⁰ C)
pH value:	8.0 - 9.0 at 20 ⁰ C (20% aqueous solution)
Oxidizing properties:	Not considered as oxidizing

9.2 Other Information: No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Reactivity: Stable at normal ambient temperature and pressure.

10.2 Chemical stability

Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid: Keep away from heat and sources of ignition.

10.5 Incompatible materials

Materials to avoid:

- Strong acids
- Strong bases
- Strong oxidizing agents
- Strong reducing agents

10.6 Hazardous decomposition products

Decomposition products: On combustion or on thermal decomposition (following the evaporation of water) releases: (Carbon oxides (CO + CO₂)). Nitrogen oxides (NO_x).

11. TOXICOLOGICAL INFORMATION

Name of Substance: Reaction products of 1H-Imidazole-1-ethanol, 4,5-dihydro-, 2-(C7-C17 odd-numbered, C17-unsatd. alkyl) derivs. and sodium hydroxide and chloroacetic acid.

11.1. Information on toxicological effects

Acute toxicity

Acute oral toxicity: D50: > 5.000 mg/kg - rat - Unpublished reports.

Acute inhalation toxicity: No data available.

Acute dermal toxicity: LD50: > 5.000 mg/kg - rat - Unpublished internal reports.

Acute toxicity (other routes of administration): No data available.

Skin corrosion/irritation

Eye irritation: Risk of serious damage to eyes. Unpublished reports

Respiratory or skin sensitisation

Sensitisation: Does not cause skin sensitisation. Unpublished reports.

Mutagenicity

Genotoxicity in vitro:

Mutagenicity (Salmonella typhimurium - reverse mutation assay):
with or without metabolic activation: Negative. Unpublished internal reports.

Mutagenicity (Escherichia coli - reverse mutation assay): with or without metabolic activation:
Negative. tested on C12 category approach. Unpublished internal reports.

Chromosome aberration test in vitro with or without metabolic activation: Negative.
Unpublished internal reports.

Mouse lymphoma test/TK with or without metabolic activation: Negative.
Unpublished internal reports

Genotoxicity in vivo: No data available.

Carcinogenicity

Carcinogenicity: No data available.

Toxicity for reproduction and development

Toxicity to reproduction/Fertility: No data available.

STOT

STOT - single exposure:

Toxicology Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure - internal evaluation.

STOT - repeated exposure:

Toxicology Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure - internal evaluation.

Oral 28 d - rat:

NOAEL: 92.5 mg/kg bw/day

Gavage.

Not considered to cause serious damage to health on repeated exposure.

Unpublished reports.

Aspiration toxicity

Aspiration toxicity: No data available.

12. ECOLOGICAL INFORMATION

Name of Substance: Reaction products of 1H-Imidazole-1-ethanol, 4,5-dihydro-, 2-(C7-C17 odd-numbered, C17-unsatd. alkyl) derivs. and sodium hydroxide and chloroacetic acid.

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish: LC50 - 96 h: 5.3 mg/l - *Oncorhynchus mykiss* (rainbow trout) semi-static test. Fresh water. Geometric mean. Unpublished reports.

Acute toxicity to daphnia and other aquatic invertebrates: EC50 - 48 h: 8,9 mg/l - *Daphnia magna* (Water flea) static test Method: OECD Test Guideline 202. Fresh water. Geometric mean. Unpublished reports.

Toxicity to aquatic plants: ErC50 - 72 h : 16,9 mg/l - *Pseudokirchneriella subcapitata* static test. Method: OECD Test Guideline 201. Fresh water. Geometric mean. Unpublished reports.

Toxicity to microorganisms: NOEC - 28 d : 66 mg/l - activated sludge.

Ecotoxicity assessment

Acute aquatic toxicity: No data available.

12.2 Persistence and degradability

Biodegradability

Biodegradability: Ready biodegradability study: Method: OECD Test Guideline 301 A 73 % - 28 d. The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability

Dissolved organic carbon (DOC). The 10 day time window criterion is not fulfilled.

The 10-day window does not apply to complex, multi-constituent substances with structurally similar constituents. Unpublished reports.

12.3 Bioaccumulative potential

Bioconcentration factor (BCF): No bioaccumulation is to be expected ($\log P_{ow} \leq 4$).

12.4 Mobility in soil

Known distribution to environmental compartments: Ultimate destination of the product: Water.

12.5 Results of PBT and vPvB assessment

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

Environment assessment: Not classified as Dangerous for the Environment according to the classification criteria for mixtures.

The product is not harmful to the marine environment as per MARPOL MEPC 63 Annex V Amendment [MEPC. 71/17/Add.1 Annex 21, Resolution MEPC 295 (71)].

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product Disposal

Prohibition: Do not let product enter drains.

Advice on Disposal: Dispose of as hazardous waste in compliance with local and national regulations.

Advice on cleaning and disposal of packaging

Measures for waste avoidance: Do not dispose of the product at a rubbish tip.

Advice: Empty the packaging completely prior to disposal. Completely empty the packaging prior to decontamination. Carefully drain and then steam clean. Offer rinsed packaging material to local recycling facilities. Dispose of contents/ container to an approved waste disposal plant.

14. TRANSPORT INFORMATION

14.1 No special transport information required according to ADR/RID, IMDG and ICAO/IATA 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

H318: Causes serious 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.