



SAFETY DATA SHEET

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

Date last modified: 19 December 2018 - version 5.0

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

1.1 Product Identifier

Product Name: F.O.T. - ULS

Product Code #: 562508 (25 lt)/562108 (210 lt)

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

Intended Use: Industrial applications; Fuel 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:

Company:

Marichem Marigases Hellas SA

Sfaktirias 64,

185 45 Piraeus,

Greece

Tel. No.: ++30 210 4148800

Fax No.: ++30 210 4133985

e-mail: mail@marichem-marigases.com

<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.

Not classified.

Hazard Statement(s):

None

2.2 Label Elements

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

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

No labelling applicable.

2.3 Other Hazards

No other hazards.

Other Information: For Industry guidance and tools on REACH please visit the CEFIC website at <http://cefic.org/Industry-support>.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical Composition:

Ingredients	CAS Number	Proportion	Hazard Code(s)*
Proprietary mixture	-	100%	-

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

4. FIRST AID MEASURES

4.1 Description of first aid measures

First-aid measures general	Remove immediately contaminated clothing.
First-aid measures after inhalation	Fresh air, rest. Never attempt to induce vomiting : risk of inhalation. Take medical advice.
First-aid measures after skin contact	Wash skin with plenty of water and soap. If necessary seek medical advice.
First-aid measures after eye contact	Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Obtain emergency medical attention.
First-aid measures after ingestion	Do NOT induce vomiting. Rinse mouth. May result in aspiration into the lungs, causing chemical pneumonia. Immediately consult a doctor/medical service.

4.2 Most important symptoms and effects, both acute and delayed

No additional information available.

4.3 Indication of any immediate medical attention and special treatment needed

No additional information available.

5. FIRE-FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

5.1 Extinguishing Media

Suitable extinguishing media	Carbon Dioxide (CO ₂), dry chemical powder, foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Fire hazard	Combustible. Heating increases the fire hazard. At temperature > flash point : increased fire/explosion hazard.
Reactivity	Reacts with: oxidising compounds and reducing agents.

5.3 Advice for fire-fighters

Protection during firefighting	Use a self-contained breathing apparatus and also a protective suit.
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6. ACCIDENTAL RELEASE MEASURES

Observe all relevant local and international regulations.

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

General measures	No naked flames, sparks, and do not smoke.
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6.1.1 For non-emergency personnel

Protective equipment	Wear suitable protective clothing.
Emergency procedures	Mark out the contaminated area with signs and prevent access to unauthorized personnel. Spill area may be slippery.

6.1.2. For emergency responders

No additional information available.

6.2 Environmental Precautions

Use appropriate container to avoid environmental contamination.

6.3 Methods and Material for Containment and Cleaning up

For containment	Prevent spillage from spreading by using sand or earth. Dike and contain spill.
Methods for cleaning up	Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite.

Additional Advice: See Chapter 13 for information on disposal. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Precautions for safe handling	Smoking, eating and drinking should be prohibited in areas of storage and use. Handle in accordance with good industrial hygiene and safety practice.
Handling temperature	> 10 °C above melting point

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions	Store tightly closed in a dry and cool place. Exclude sources of heat, sparks and open flame.
Prohibitions on mixed storage	Keep away from ignition sources. strong acids. strong bases.
Special rules on packaging	closing. correctly labelled. meet the legal requirements.

7.3 Specific end use(s)

No additional information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

No additional information available.

8.2 Exposure Controls

Personal protective equipment	Gloves. Protective clothing. Safety glasses.
Materials for protective clothing	nitrile rubber.
Hand protection	Wear suitable gloves.
Eye protection	In case of risky circumstances: safety glasses or face shield.
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	Where exposure through inhalation may occur from use, approved respiratory protection equipment is recommended.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

9.1.1. Appearance

Physical State:	Clear liquid
Color:	Yellow
Odor:	Characteristic (slight)

9.1.2. Basic data

Boiling Point:	ca. 350 ⁰ C
Freezing Point:	ca. -20 ⁰ C
Flash Point:	> 120 ⁰ C (ASTM D92)
Self ignition Temperature:	340 ⁰ C
Vapour Pressure:	ca 4.s mbar at 25 ⁰ C
Relative vapor density (air=1):	Not available.
Bulk Density (kg/m³):	Not available.
Kinematic Viscosity:	ca 1.8 mm ² /s at 100 ⁰ C
Dynamic Viscosity:	Not available.
Specific Gravity:	0.87 - 0.90 gr/cm ³ at 20 ⁰ C (ASTM D 1298)

9.2 Other Information: No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Reacts with : oxidising compounds and reducing agents.

10.2 Chemical stability

Stable under normal conditions of use.

10.3 Possibility of Hazardous Reactions

Self ignition can occur by auto oxidation in with product drenched rags. . Polymerisation can occur above 180⁰ C.

10.4 Conditions to Avoid

No naked flames, sparks, and do not smoke.

10.5 Incompatible Materials

No additional information available.

10.6 Hazardous Decomposition Products

On burning: release of carbon monoxide - carbon dioxide.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity	Not classified
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
Skin corrosion/irritation	Not classified (Conclusive but not sufficient for classification)
Serious eye damage/irritation	Not classified (Conclusive but not sufficient for classification)
Respiratory or skin sensitisation	Not classified (Conclusive but not sufficient for classification)
Germ cell mutagenicity	Not classified (Conclusive but not sufficient for classification)
Carcinogenicity	Not classified (Conclusive but not sufficient for classification)
Reproductive toxicity	Not classified (Conclusive but not sufficient for classification)
Specific target organ toxicity (single exposure)	Not classified (Lack of data)
Specific target organ toxicity (repeated exposure)	Not classified (Lack of data)
Aspiration hazard	Not classified (Lack of data)

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecology - general	No dangerous reactions known.
Ecology - air	No data available.
LC50 fishes 1	> 0,26 mg/l LR50 (96h)
LC50 other aquatic organisms 1	ca. 73729 mg/l <i>Selenastrum capricornum</i> (72h)
EC50 Daphnia 1	ca. 2504 mg/l (48h)
ErC50 (algae)	> 0,131 mg/l (72h)

12.2 Persistence and Degradability

Persistence and degradability	> 70% after 28 days OECD Guideline 301B.
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12.3 Bioaccumulative potential

No additional information available.

12.4 Mobility in soil

No additional information available.

12.5 Results of PBT and vPvB assessment

No additional information available.

12.6 Other adverse effects

No additional information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Ecology - waste materials	Collect all waste in suitable and labelled containers and dispose according to local legislation.
EURLW code	No supplementary information available.

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

No Hazard Code(s).

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.