



## SAFETY DATA SHEET

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

Date last modified: 30 March 2015 - version 4.0

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

#### 1.1 Product Identifier

**Product Name:** HAND CLEANER

**Product Code #:** 830501 (5 lt)

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

**Intended Use:** Industrial applications; Cleaning agent for the hands.

**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

### 2.1 Classification of the mixture

Classification under EC 1272/2008 regulation - GHS classification.

Acute Toxicity - Oral: Acute Tox. 5  
Sensitisation, Skin: 1B  
Serious Eye Damage/Eye Irritation: 2B

**SIGNAL WORD: WARNING**



**Hazard Statement(s):**

H303 May be harmful if swallowed.  
H320 Causes 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**

H303 May be harmful if swallowed.  
H320 Causes eye irritation.

**Precautionary Statements**

**Prevention:**

P301 + P330 IF SWALLOWED: rinse mouth.  
P305+351 IF IN EYES: Rinse continuously with water for several minutes.

### **2.3 Other hazards**

PBT Substances: None  
vPvB Substances: None

Other Hazards  
No other hazards.

**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) Irritant**

- R-phrases:** R41: Risk of serious damage to eyes.
- 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.  
 S39: Wear eye/face protection.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Chemical Composition:**

<b>Ingredients</b>	<b>CAS Number</b>	<b>Proportion</b>	<b>Hazard Code(s)*</b>
Proprietary mixture consisting of the following substances :			
Decane	124-18-5	12.5% - 50%	H226; H304
Ethoxylated Fatty Alcohol	68439-50-9	5% - 12%	H302; H318; H412
Branched Alcohol polyethoxyethylenated	308061-04-3	2.5% - 7%	H302; H318; H412
Amides, C818 (even numbered) and C18unsatd., N, N bis (hydroxyethyl)	68155-07-7	1% - 3%	H315; H318; H411
Potassium Hydroxide, solution	1310-58-3	0.1% - 1%	H290 ; H302; H314; H318
Ingredients that do not contribute to the classification of the product	-	40% - 70%	-

\*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:

Adverse effects not expected.

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.

### 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 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

Avoid contact with eyes. Wash with water after use if available or wipe off thoroughly with a dry towel.

### 7.2. Conditions for safe storage, including any incompatibilities

Follow label directions carefully. Keep out of reach of children. Keep container tightly sealed when not in use. Do not contaminate water, food, or feed by use or storage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Substance Name	Exposure limit values
Europe Potassium Hydroxide	ACGIH TLV (United States, 6/2013). C: 2 mg/m <sup>3</sup>
Germany Decane	TRGS900 AGW (Germany, 9/2013). TWA: 600 mg/m <sup>3</sup> 8 hours. PEAK: 1200 mg/m <sup>3</sup> 15 minutes.
Spain Potassium Hydroxide	INSHT (Spain, 3/2013). STEL: 2 mg/m <sup>3</sup> 15 minutes.

### **Recommended monitoring procedures**

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### **DNELs/DMELs**

<b>Substance Name</b>	<b>Type</b>	<b>Exposure</b>	<b>Value</b>	<b>Population</b>	<b>Effects</b>
Amides, C818 (even numbered) and C18unsatd., N, N bis (hydroxyethyl)	DNEL	Long term Dermal	4,16 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	73,4 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	0,09 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	2,5 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	21,73 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Oral	21,73 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Dermal	0,056 mg/cm <sup>2</sup>	Consumers	Local

### **PNECs**

<b>Substance Name</b>	<b>Compartment Detail</b>	<b>Value</b>	<b>Method Detail</b>
Amides, C818 (even numbered) and C18unsatd., N, N bis (hydroxyethyl)	Fresh water	2,4 µg/l	Assessment Factors
	Marine	0,24 µg/l	Assessment Factors
	Sewage Treatment Plant	830 mg/l	Assessment Factors
	Fresh water sediment	14,5 µg/kg dwt	Assessment Factors
	Soil	6,48 µg/kg dwt	Assessment Factors

## **8.2 Exposure Controls**

### **Appropriate engineering controls**

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### **PERSONAL PROTECTION**

Adverse human health effects not expected from simple hand cleaner gel based upon available toxicity information for individual components & laboratory toxicity data for whole product.

**Eye and face protection:** None required.

**Skin protection:** None required.

**Respiratory protection:** None required.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties**

#### **9.1.1. Appearance**

**Physical State:** Gel  
**Color:** Light Orange  
**Odor:** Lemon scent

#### **9.1.2. Basic data**

**Boiling Point Range:** 90-100 °C at 20°C  
**Solubility in water:** Appreciable  
**Flash Point:** None  
**Autoignition Temperature:** None  
**Vapour Pressure:** Not available  
**Relative vapor density (air= 1) :** >1  
**Specific Gravity:** 0,9 – 1.00 gr/cm<sup>3</sup> at 15 °C  
**pH (1% solution):** 7

**9.2 Other Information:** No further relevant information available.

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

No specific test data related to reactivity available for this product or its ingredients.

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4. Conditions to avoid

No special precautions other than good housekeeping of chemicals.

### 10.5. Incompatible materials

Substances to avoid: strong oxidizing agents.

### 10.6. Hazardous decomposition products

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Substance Name	Result	Species	Dose
Decane	LD50 Dermal	Rat	>2000 mg/kg
	LD50 Oral	Rat	>5000 mg/kg
Ethoxylated fatty alcohol	LD50 Oral	Rat	500 to 2000 mg/kg
Branched alcohol polyethoxyethylenated	LD50 Oral	Rat	500 to 2000 mg/kg
Amides, C8-18 (even numbered) and C18 unsatd., N, N bis (hydroxyethyl)	LD50 Dermal	Rabbit	>2 g/kg
	LD50 Oral	Rat	>2000 mg/kg
Potassium Hydroxide	LD50 Oral	Rat	333 to 388 mg/kg

#### Acute toxicity estimates

Route: Oral

ATE value: 2326 mg/kg

#### Irritation/Corrosion

**Name of Substance: Amides, C8-18 (even numbered) and C18 unsatd., N, N bis (hydroxyethyl)**

Species: Rabbit - Result: Skin - moderate irritant.



Species: Rabbit - Result: Eyes - severe irritant.

### Sensitizer

Substance Name	Route of exposure	Species	Result
Decane	Skin	Guinea pig	Not sensitizing
Amides, C8-18 (even numbered) and C18 unsatd., N, N bis (hydroxyethyl)	Skin	Guinea pig	Not sensitizing

### Mutagenicity

Substance Name	Test	Experiment	Result
Decane	-	In vitro. Subject: Bacteria	Negative
Amides, C8-18 (even numbered) and C18 unsatd., N, N bis (hydroxyethyl)	OECD 471 Bacterial Reverse Mutation Test	In vitro. Subject: Bacteria	Negative
	OECD 474 Mammalian Erythrocyte Micronucleus Test	In vivo. Subject: Mammalian - Animal	Negative

### Carcinogenicity

No known significant effects or critical hazards.

### Reproductive toxicity

Substance Name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Decane	Negative	Negative	Negative	Rat	Oral	-

### Teratogenicity

Substance Name	Result	Species	Dose	Exposure
Decane	Negative - Oral	Rat	-	-

### Aspiration hazard

Substance Name	Result
Decane	Aspiration Hazard - Category 1

### Potential acute health effects

**Inhalation:** Not possible to occur.

**Skin contact:** None adverse effect.

**Eye contact:** May cause irritation.

**Ingestion:** Ingestion of small quantities not serious unless aspiration occurs. Aspiration may lead to chemical pneumonitis.

## Potential chronic health effects

Substance Name	Result	Species	Dose
Decane	Sub-acute NOAEL Oral	Rat	$\geq 1000$ mg/kg
	Sub-acute NOAEL Inhalation Vapor	Rat	$> 6000$ mg/m <sup>3</sup>
Amides, C8-18 (even numbered) and C18 unsatd., N, N bis (hydroxyethyl)	Sub-acute NOAEL Oral	Rat - Male, Female	$>750$ mg/kg
	Sub-acute NOAEL Oral	Rat - Male, Female	50 mg/kg

## Conclusion/Summary

**Carcinogenicity:** No known significant effects or critical hazards.

**Mutagenicity:** No known significant effects or critical hazards.

**Teratogenicity:** No known significant effects or critical hazards.

**Developmental effects:** No known significant effects or critical hazards.

**Fertility effects:** No known significant effects or critical hazards.

**Absorption:** Not available.

**Distribution:** Not available.

**Metabolism:** Not available.

**Elimination:** Not available.

**Other information:** Not available.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Substance Name	Result	Species	Exposure	Test
Decane	Acute EC50 $>1000$ mg/l	Algae	72 hours	OECD 201 Algae, Growth Inhibition Test
	Acute LC50 18 to 24 mg/l	Daphnia	48 hours	-
	Acute LC50 $>500$ mg/l	Fish	96 hours	-
	Acute NOEC 100 mg/l	Algae	72 hours	OECD 201 Algae, Growth Inhibition Test
	Chronic NOEC 1,3 mg/l	Daphnia	48 hours	-
	Chronic NOEC 500 mg/l	Fish	96 hours	-
Ethoxylated fatty alcohol	Acute LC50 $>1$ mg/l	Fish	96 hours	OECD 203
	Chronic NOEC 0,14 mg/l	Algae	72 hours	-
Branched alcohol polyethoxyethylenated	Acute LC50 $>1$ mg/l	Fish	96 hours	-
	Chronic EC50 0,17 mg/l	Daphnia	21 days	-

Amides, C8-18 (even numbered) and C18 unsatd., N, N bis (hydroxyethyl)	Acute EC50 18,6 mg/l Fresh water	Algae	72 hours	EU M.C3
	Acute EC50 3,2 mg/l Fresh water	Daphnia	48 hours	OECD 202 <i>Daphnia</i> sp. Acute Immobilization Test and Reproduction Test
	Acute LC50 2,4 mg/l Fresh water	Fish	96 hours	OECD 203 Fish, Acute Toxicity Test
	Chronic NOEC 2 mg/l	Algae	72 hours	EU Method C.3 (Algal Inhibition test)
	Chronic NOEC 0,07 mg/l Fresh water	Daphnia	21 days	OECD 211 <i>Daphnia Magna</i> Reproduction Test
	Chronic NOEC 0,32 mg/l	Fish	28 days	OECD 204 Fish, Prolonged Toxicity Test: 14 Day Study and 215 Fish, Juvenile Growth Test

## 12.2 Persistence and Degradability

Substance Name	Test	Result
Amides, C8-18 (even numbered) and C18 unsatd., N, N bis (hydroxyethyl)	OECD 301D Ready Biodegradability - Closed Bottle Test	> 60 % Readily 28 days

Substance Name	Aquatic half-life	Photolysis	Biodegradability
Decane	-	< 28 day(s)	Readily
Ethoxylated fatty alcohol	-	-	Readily
Branched alcohol polyethoxyethylenated	-	-	Readily
Amides, C8-18 (even numbered) and C18 unsatd., N, N bis (hydroxyethyl)	-	-	Readily

## 12.3 Bioaccumulative potential

Substance Name	LogP <sub>ow</sub>	BCF	Potential
Decane	5.86	-	high
Amides, C8-18 (even numbered) and C18 unsatd., N, N bis (hydroxyethyl)	-	65.36	low

## 12.4 Mobility in soil

Soil/water partition coefficient (KOC): Not available.

Mobility: Not available.

## **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. Additional information**

No known significant effects or critical hazards.

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 for the transportation, according to UN, IMDG, ADR/RID, U.S. D.O.T. 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 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**

H226: Flammable liquid and vapor.

H290: May be corrosive to metals.

H302: Harmful if swallowed.  
H304: May be fatal if swallowed and enters airways.  
H314: Causes severe skin burns and eye damage.  
H315: Causes skin irritation.  
H318: Causes serious eye damage.  
H411: Toxic to aquatic life with long lasting effects.  
H412: Harmful to aquatic life with long lasting effects.

## **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.