SAFETY DATA SHEET

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

Date last modified: 27 October 2020 - Version 6.0

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

1.1 Product Identifier

Product Name: GENERAL CLEANING & SOLVENT SUPER
Product Code #: 833015 (30 lt)

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

Intended Use: Industrial applications; Cleaning agent for motor vessel's large and small surface areas.

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.

Labeling

Symbol : 

Signal Word: WARNING

Acute Toxicity - Oral: Acute Tox. 4
Acute Toxicity - Dermal: Acute Tox. 4
Acute Toxicity - Inhalation: Acute Tox. 4
Skin Corrosion/Irritation: Skin Irrit. 2
Serious Eye Damage / Eye Irritation: Eye Irrit. 2

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:

H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.

Precautionary Statements:

Prevention:

P280: Wear protective gloves/protective clothing/eye protection/face protection.
P271: Use only outdoors or in a well-ventilated area.
P260: Do not breathe mist/vapours.
P264: Wash with excess of water and soap thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.

Response:

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P305 + P351 + P338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P302 + P352: IF ON SKIN: Wash with soap and water.
P361: Remove/Take off immediately all contaminated clothing.
P301 + P330: IF SWALLOWED: Rinse mouth.
P332 + P313: IF skin irritation occurs: Get medical advice/attention.
P337 + P311: If eye irritation persists: Call a POISON CENTER or doctor/physician.
P362: Take off contaminated clothing and wash before use.

Disposal:

P501: Dispose of contents/container to follow the regional regulation.

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

Not Required According to EC Directive 99/45/EC.

Safety Phrases – (S - Phrases):

S2: Keep out of the reach of children.
S23: Do not breathe gas/vapour
S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S51: Use only in well-ventilated areas.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical Composition:

Ingredients	CAS Number	Proportion	Classification*
2-Butoxyethanol	111-76-2	10% - 40%	H302; H312; H315; H339; H352.
Ingredients that do not contribute to the classification of the product	-	60% - 90%	-

*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:
Wash thoroughly with soap and water.
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.
Hazards: Skin resorption hazard.

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

The product is combustible. 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 skin, 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

Ensure thorough ventilation of stores and work areas.
Prevent contact with air/oxygen (formation of peroxide).
Protection against fire and explosion:
Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

7.2. Conditions for safe storage, including any incompatibilities

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with occupational exposure limits: 2-Butoxyethanol

Skin Designation (OEL (EU))
The substance can be absorbed through the skin.
TWA value 98 mg/m3 ; 20 ppm (OEL (EU)) - indicative
STEL value 246 mg/m3 ; 50 ppm (OEL (EU)) - indicative

PNEC
freshwater: 8.8 mg/l
marine water: 0.88 mg/l
intermittent release: 9.1 mg/l
sediment (freshwater): 34.6 mg/kg
sediment (marine water): 3.46 mg/kg
soil: 3.13 mg/kg
STP: 463 mg/l
oral (secondary poisoning): 20 mg/kg

DNEL
worker:
Long-term exposure- systemic effects, dermal: 75 mg/kg
worker:
Long-term exposure- systemic effects, Inhalation: 20 ppm
consumer:
Long-term exposure- systemic effects, dermal: 38 mg/kg
consumer:

Long-term exposure- systemic effects, oral: 3.2 mg/kg
consumer:
Short-term exposure - local effects, Inhalation: 123 mg/m^3
consumer:
Long-term exposure- systemic effects, Inhalation: 49 mg/m^3

8.2. Exposure controls

Personal protective equipment

Respiratory protection:
Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

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): butyl rubber (butyl) - 0.7 mm coating thickness
Manufacturer's directions for use should be observed because of great diversity of types.
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.

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

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures
Avoid contact with the skin, eyes and clothing. Avoid inhalation of vapour. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

9.1.1. Appearance

Physical State:	Liquid
Color:	Colorless
Odor:	Mild, characteristic odor

9.1.2. Basic data

Boiling Point Range:	>100^{o}C
Melting Point Range:	Not Available

Flash Point:	None
Autoignition Temperature:	Not Available
Vapour Pressure:	<0.01 mmHg at 20°C
Relative vapor density (air=1):	Not Available
Specific Gravity (gr/cm^3):	1.00 at 15^{0}C
Bulk Density (gr/cm^3):	Not Available
Solubility:	soluble in water
Viscosity:	2.10 cSt at 20^0 C
pH Value:	7 - 8

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.
Corrosion to metals: No corrosive effect on metal.
Formation of flammable gases:
Remarks: Forms no flammable gases in the presence of water.

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

10.3. Possibility of hazardous reactions
Reacts with light metals, with evolution of hydrogen. Reacts with strong oxidizing agents.

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

Name of Substance: 2-Butoxyethanol

Acute toxicity
Assessment of acute toxicity:

Of moderate toxicity after short-term inhalation.
Of moderate toxicity after short-term skin contact.
Of moderate toxicity after single ingestion. EU-classification.
Experimental/calculated data:
LD50 rat (oral): 1,746 mg/kg
LC50 rat (by inhalation): 2 - 20 mg/l 4 h (IRT)
LD50 guinea pig (dermal): > 2,000 mg/kg (OECD Guideline 402)

Irritation
Assessment of irritating effects:
Eye contact causes irritation. Skin contact causes irritation.
Experimental/calculated data:
Skin corrosion/irritation rabbit: Irritant. (BASF-Test)
Serious eye damage/irritation rabbit: Irritant. (OECD Guideline 405)

Respiratory/Skin sensitization
Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.
Experimental/calculated data: Guinea pig maximization test guinea pig: Non-sensitizing.
(similar to OECD guideline 406)

Germ cell mutagenicity
Assessment of mutagenicity:
In the majority of tests performed (bacteria/microorganisms/cell cultures) a mutagenic effect was not found. A mutagenic effect was also not observed in in-vivo assays.

Carcinogenicity
Assessment of carcinogenicity:
Indication of possible carcinogenic effect in animal tests. A clear indication of an increased risk of cancer in humans has so far not been shown. IARC Group 3 (not classifiable as to human carcinogenicity).

Reproductive toxicity
Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity
Assessment of teratogenicity:
The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals. After the uptake of small doses toxicity to development will not be expected in humans.

Specific target organ toxicity (single exposure)
Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)
Assessment of repeated dose toxicity:
No substance-specific organ toxicity was observed after repeated administration to animals.

Aspiration hazard
Not applicable.

Other relevant toxicity information
Skin resorption hazard.

12. ECOLOGICAL INFORMATION

Name of Substance: 2-Butoxyethanol

12.1. Toxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. Based on long-term (chronic) toxicity study data, the product is very likely not harmful to 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) 1,474 mg/l, Oncorhynchus mykiss (OECD Guideline 203, static)
Nominal concentration. Literature data.

Aquatic invertebrates:
EC50 (48 h) 1,550 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
Nominal concentration. Literature data.

Aquatic plants:
EC50 (72 h) 1,840 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
Nominal concentration. Literature data.

Microorganisms/Effect on activated sludge:
Toxic limit concentration (16 h) > 700 mg/l, Pseudomonas putida (DIN 38412 Part 8, static)
Nominal concentration. Literature data.

Chronic toxicity to fish:
No observed effect concentration (21 d) > 100 mg/l, Brachydanio rerio (semistatic)
Nominal concentration. Literature data.

Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d) 100 mg/l, Daphnia magna (OECD Guideline 211, semistatic).
Nominal concentration. Literature data.
Assessment of terrestrial toxicity:
Study scientifically not justified.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H_2O):
Readily biodegradable (according to OECD criteria).
Elimination information:
90 % TIC of the ThIC (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge)
Assessment of stability in water: Study scientifically not justified.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:
Significant accumulation in organisms is not to be expected.

12.4. Mobility in soil

Assessment transport between environmental compartments:
Volatility: The substance will not evaporate into the atmosphere from the water surface.
Adsorption in soil: Adsorption to solid soil phase is not expected. Study scientifically not justified.

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

Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen.

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 hazardous material according to UN, IMO, 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

H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.

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).ID: 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.