SAFETY DATA SHEET

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

Date last modified: 12 December 2019 - Version 6.0

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

1.1 Product Identifier

Product Name: ALCACTIVE LIQUID
Product Code #: 833004 (30 lt)

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

Intended Use: Industrial applications; Cleaning agent for machinery, equipment & cargo holds and tanks.

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.

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

Labeling

Symbol : 

Signal Word: WARNING

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.
H335: May cause respiratory irritation.

Precautionary Statements:

Prevention:

P102 Keep out of reach of children.

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.

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: **Xn, Harmful**

Harmful (Xn)

R-phrases:
R22: Harmful if swallowed.
R38: Irritating to skin.
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.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S46: If swallowed, seek medical advice immediately and show the container or label.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Composition:

Ingredients	CAS Number	Proportion	Hazard Code(s)*
2-Butoxyethanol	111-76-2	10% - 20%	H302; H312; H315; H319; H352.
2,2 Iminodiethanol	111-42-2	1% - 5%	H318; H373; H315;
2-Propylheptanol Ethoxylate	160875-66-1	1% - 10%	H318.
Ingredients that do not contribute to the classification of the product	-	65% - 88%	-

*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

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 workplace control parameters

Name of Substance: 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

Name of Substance: 2,2 Iminodiethanol (Diethanolamine)

Component	Regulation	Type of listing	Value/Notation
2,2'-Iminodiethanol; diethanolamine	ACGIH	TWA Inhalable fraction and vapor	1 mg/m^3
	ACGIH	TWA	Absorbed via skin
	Dow IHG	TWA	0.2 mg/m^3
	Dow IHG	TWA	Absorbed via skin

Name of Substance: 2-Propylheptanol Ethoxylate

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Name of Substance: 2-Butoxyethanol

UK Workplace Exposure Limits

2-Butoxyethanol	EH40 WEL	TWA	25 ppm		
	EH40 WEL	STEL	50 ppm		
	EH40 WEL	SKIN_DES			Can be absorbed through the skin.

Name of Substance: 2,2 Iminodiethanol (Diethanolamine)

Component	Exposure Limits	Skin	Form
2,2 Iminodiethanol	2 mg/m^3 TWA8 ACGIH	Yes	

In the exposure Limits chart above, if there is no specific qualifier (i.e. Aerosol) listed in the Form Column for a particular limit; the listed limit includes all airborne forms of the substance that can be inhaled.
A "Yes" in the Skin Column indicates a potential significant contribution to overall exposure by the cutaneous (skin) route, including mucous membranes and the eyes, either by contact with vapors or by direct skin contact with the substance.

Name of Substance: 2-Propylheptanol Ethoxylate

No exposure limits have been established.

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:	Soft, lemon odor

9.1.2. Basic data

Boiling Point Range:	>100^{o}C
Melting Point Range:	Not Available
Flash Point:	Not Applicable
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 - 1.02 at 20^0 C
Bulk Density (g/cm^3):	Not Available
Solubility:	Completely soluble in water
Viscosity:	2.58 cSt at 20^0 C
pH value:	10.5 – 11.5

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.
Decomposition products depend upon temperature, air supply and the presence of other materials.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

EXPOSURE LIMITS

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.

Name of Substance: 2,2 Iminodiethanol (Diethanolamine)

Acute toxicity

Acute oral toxicity
Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.
For similar material(s):
LD50, Rat, > 4,000 mg/kg

Acute dermal toxicity
Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Based on information for component(s):
LD50, Rabbit, > 2,000 mg/kg No deaths occurred at this concentration.

Acute inhalation toxicity
At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material may cause respiratory irritation and other effects.
LC0, Rat, male, 4 Hour, Aerosol, 3.35 mg/l

Skin corrosion/irritation
Prolonged contact may cause skin irritation with local redness.

Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage.

Serious eye damage/eye irritation
May cause severe eye irritation.
May cause severe corneal injury.

Sensitization
For the major component(s):
Skin contact may cause an allergic skin reaction in a small proportion of individuals.
Did not cause allergic skin reactions when tested in guinea pigs.
For respiratory sensitization:
No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure)
Results from repeated exposure tests on diethanolamine in laboratory animals include anemia (rats) and effects on kidney (rats and mice) and liver (mice). Heart and nervous system effects were also observed in animals given exaggerated doses of diethanolamine. Changes in other organs, causes of which are non-specific, were judged secondary to the poor health of the animals due to the extremely high doses of diethanolamine given.
Contains component(s) which have been reported to cause effects on the following organs in animals:
Male reproductive organs.
Propylene glycol monomethyl ether acetate.

Carcinogenicity
For the major component(s): Findings from a chronic skin painting study by NTP include liver tumors in mice. Mechanistic studies indicate that tumor formation is of questionable relevance to humans. Findings from a chronic diethanolamine skin painting study by NTP include liver and kidney tumors in mice; no tumors were observed in rats. Mechanistic studies indicate that tumor formation is of questionable relevance to humans. A number of factors may have influenced the results and are being considered in their interpretation.

Teratogenicity
For the major component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. However, the relevance of this to humans is unknown. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

Reproductive toxicity
Based on information for component(s): Repeated excessive exposures to high amounts may cause effects on testes and fertility in males.

Mutagenicity
Based on information for component(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Aspiration Hazard
Based on available information, aspiration hazard could not be determined.

Name of Substance: 2-Propylheptanol Ethoxylate

Acute oral toxicity: LD50: > 2,000 - 5,000 mg/kg
Species: rat
The value is estimated from tests on similar products.

Acute inhalation toxicity: LC50: > 20 mg/l

Acute dermal toxicity: LD50: > 2,000 - 5,000 mg/kg

Skin irritation: No skin irritation

Eye irritation: Risk of serious damage to eyes.

Sensitisation: Not sensitizing.

Repeated dose toxicity: NOEL: 250 mg/kg

Germ cell mutagenicity

Genotoxicity in vitro: Negative
Genotoxicity in vivo: Negative

Target Organ Systemic Toxicant - Repeated exposure: NOEL: 250 mg/kg

HEALTH EFFECTS

Inhalation: Inhalation may cause irritation with coughing and sore throat. High concentrations may cause central nervous system depression with headache, light headedness, dizziness, drowsiness, unconsciousness, and pulmonary oedema. Intravascular haemolysis, bone marrow depression, and delayed kidney damage may occur.

Skin contact: Direct contact may cause minor irritation, with redness, roughness, and defatting of the skin. A moderate dose was lethal to rabbits tested but systemic effects were not reported.

Eye contact: May cause irritation, with redness and pain, and transient corneal injury.

Ingestion: May cause nausea, vomiting, diarrhoea and central nervous system depression with headache, dizziness, light headedness, drowsiness, and convulsions. Poisoning may cause kidney damage, blood effects, bone marrow depression, pulmonary edema, cyanosis, coma, and possible death.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Name of Substance: 2-Butoxyethanol

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.

Name of Substance: 2,2 Iminodiethanol (Diethanolamine)

Acute toxicity to fish
Material is toxic to aquatic organisms (LC50/EC50/IC50 between 1 and 10 mg/L in the most sensitive species).
May increase pH of aquatic systems to > pH 10 which may be toxic to aquatic organisms.
LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, 1,460 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates
EC50, Daphnia magna (Water flea), static test, 48 Hour, 55 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants
ErC50, Pseudokirchneriella subcapitata (green algae), 96 Hour, Growth rate inhibition, 2.2 mg/l, OECD Test Guideline 201 or equivalent.

Toxicity to bacteria
EC50, Respiration inhibition, 3 Hour, > 1,000 mg/l, activated sludge test (OECD 209)

Chronic toxicity to aquatic invertebrates
NOEC, Daphnia magna (Water flea), semi-static test, 21 d, 0.78 mg/l
LOEC, Daphnia magna (Water flea), semi-static test, 21 d, 1.56 mg/l

Name of Substance: 2-Propylheptanol Ethoxylate

Toxicity to fish
LC50: > 10 - 100 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates
EC50: > 10 - 100 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Toxicity to algae
EC50: > 10 - 100 mg/l
Exposure time: 72 h
Species: algae

12.2 Persistence and Degradability

Name of Substance: 2-Butoxyethanol

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.

Name of Substance: 2,2 Iminodiethanol (Diethanolamine)

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).
10-day Window: Pass

Biodegradation: 93 %
Exposure time: 28 d
Method: OECD Test Guideline 301F or equivalent.

Name of Substance: 2-Propylheptanol Ethoxylate

Degradation: Readily biodegradable. >60% BOD, 28 days, Closed Bottle Test (OECD 301D).

12.3 Bioaccumulative potential

Name of Substance: 2-Butoxyethanol

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

Name of Substance: 2,2 Iminodiethanol (Diethanolamine)

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water(log Pow): -2.18 at 25 °C OECD Test Guideline 107 or equivalent.

Name of Substance: 2-Propylheptanol Ethoxylate

Bioaccumulation: Bioaccumulation is unlikely.

12.4 Mobility in soil

Name of Substance: 2-Butoxyethanol

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.

Name of Substance: 2,2 Iminodiethanol (Diethanolamine)

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient(Koc): 1 Estimated.

Name of Substance: 2-Propylheptanol Ethoxylate

Bioaccumulation is unlikely.

12.5 Results of PBT and vPvB assessment

Name of Substance: 2-Butoxyethanol

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The substance does not fulfil the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative). Self classification.

Name of Substance: 2,2 Iminodiethanol (Diethanolamine)

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).

Name of Substance: 2-Propylheptanol Ethoxylate

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 Other adverse effects

Name of Substance: 2-Butoxyethanol

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

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

Name of Substance: 2,2 Iminodiethanol (Diethanolamine)

This substance is not in Annex I of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

Name of Substance: 2-Propylheptanol Ethoxylate

No data available.

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 transportation 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.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
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.