

SAFETY DATA SHEET

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

Date last modified: 04 February 2020 - version 1.0

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

1.1 Product Identifier

Product Name: MARICHEM ANTISEPTIC LIQUID

Product Code: 830510 (5L)

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

Intended Use: Industrial applications; Alcohol-based disinfectant product.

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:

MCMG Worldwide Ltd. 1, Zakinthou Street,

P.C. 3107,

P.O. BOX: 53420, P.C. 3302 LIMASSOL,

CYPRUS.

Tel. No.: +357 25 590420 Fax No.: +357 25 590421

e-mail: marichem-marigases@cytanet.com.cy

e-mail: marichem-marigases@cytanet.com.cy

1.4 Emergency telephone number

Tel. No.: ++ 357 25 590420 (including working hours)

Emergency Information:

Inside U.S. and Canada: (800)-424-9300 (CHEMTREC) Outside U.S. and Canada: 1-703-527-3887 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture

Classification under EC 1272/2008 regulation - GHS classification.

Flammable liquids - Category 2; H225 Highly flammable liquid and vapour.

Serious eye damage/eye irritation - Category 1; H318 Causes serious eye damage.

Specific target organ toxicity (single exposure); Respiratory tract irritation - Category 3; H335 May cause respiratory irritation.

Skin corrosion/irritation - Category 2; H315 Causes skin irritation.

Specific target organ toxicity (single exposure); Narcotic effects - Category 3; H336 May cause drowsiness or dizziness.

Acute toxicity, oral – Category 4; H303 May be harmful if swallowed.

Aspiration hazard – Category 1; H304 May be fatal if swallowed and enters airways.

SIGNAL WORD: DANGER







GHS02

GHS07

GHS08

Hazard Statement(s):

H225: Highly flammable liquid and vapour.

H303: May be harmful if swallowed.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

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







GHS02

GHS07

GHS08

Hazard Statement(s):

H225: Highly flammable liquid and vapour.

H303: May be harmful if swallowed.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

Precautionary Statements

Prevention

P102: Keep out of reach of children.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear eye protection/face protection.

Response

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+361+352: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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.

P331: Do NOT induce vomiting.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P362+364: Take off contaminated clothing and wash it before reuse.

P370 + P378: In case of fire: Use foam, dry chemicals, Carbon Dioxide (CO₂) for extinction.

Storage

P403 + P233: Store in a well ventilated place. Keep container tightly closed.

P403 + P235: Store in a well ventilated place. Keep cool.

P405: Store locked up.

Disposal

P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

2.3 Other Hazards

Health Hazards: Repeated exposure may cause skin dryness or cracking. Possibility of organ or organ system damage from prolonged exposure; see Chapter 11 for details. Target organ(s): Auditory system.

Safety Hazards: In use, may form flammable/explosive vapour-air mixture. This material is a static accumulator. Even with proper grounding and bonding, this material can still accumulate an electrostatic

charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable airvapour mixtures can occur.

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)*
Isopropyl alcohol	67-63-0	60% - 90%	H225; H303; H304;
			H320; H335; H336.
Hydrogen Peroxide 30%	7722-84-1	1% - 5%	H271; H302; H314;
w/w			Н332.
Ingredients that do not	-	5% - 39%	-
contribute to the			
classification of the			
product			

^{**}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 Information: Not expected to be a health hazard when used under normal conditions.

Inhalation: Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

Skin Contact: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

Eye Contact: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

Ingestion: If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3° C), shortness of breath, chest congestion or continued coughing or wheezing.

4.2 Most important symptoms and effects, both acute and delayed

If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. Auditory system effects may include temporary hearing loss and/or ringing in the ears.

4.3 Indication of any immediate medical attention and special treatment needed

Potential for chemical pneumonitis. Call a doctor or poison control center for guidance.

5. FIRE-FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

5.1 Extinguishing Media

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.

Unsuitable Extinguishing Media: Do not use water in a jet.

5.2 Special hazards arising from the substance or mixture

Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. The vapour is heavier than air, spreads along the ground and distant ignition is possible.

5.3 Advice for fire-fighters

Wear full protective clothing and self-contained breathing apparatus.

Additional Information: Keep adjacent containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

Observe all relevant local and international regulations.

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

6.2 Environmental Precautions

Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays.

Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas indicator.

6.3 Methods and Material for Containment and Cleaning up

For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

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

General Precautions

Avoid breathing vapours. Only use in well ventilated areas. Wash thoroughly after handling more than the prescribed quantity. On guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

7.1 Precautions for Safe Handling

Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Avoid contact with skin (when more than the prescribed quantity), eyes and clothing. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Be aware of handling operations that may give rise to additional hazards that result from the accumulation of static charges. These include but are not limited to pumping (especially turbulent flow), mixing, filtering, splash filling, cleaning and filling of tanks and containers, sampling, switch loading, gauging, vacuum truck operations, and mechanical movements. These activities may lead to static discharge e.g. spark formation. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<= 1 m/s until fill pipe submerged to twice its diameter, then <= 7 m/s). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

Product Transfer

Keep containers closed when not in use. Refer to guidance under Handling section.

7.2 Conditions for safe storage, including any incompatibilities

Electrostatic charges will be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to reduce the risk. The vapours in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flammable. Must be stored in a diked (bunded) wellventilated area, away from sunlight, ignition sources and other sources of heat. Bulk storage tanks should be diked (bunded).

Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products which are not harmful or toxic to man or to the environment. Storage Temperature: Ambient.

Unsuitable Materials

Avoid prolonged contact with natural, butyl or nitrile rubbers.

Container Advice

Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers.

7.3 Specific end use(s)

Additional Information

Ensure that all local regulations regarding handling and storage facilities are followed. See additional references that provide safe handling practices for liquids that are determined to be static accumulators: American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practices on Static Electricity). CENELEC CLC/TR 50404 (Electrostatics – Code of practice for the avoidance of hazards due to static electricity).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Name of Substance: Isopropyl Alcohol

Occupational Exposure Limits

American Conference of Governmental Industrial Hygienists (ACGIH) – TWA 200ppm. American Conference of Governmental Industrial Hygienists (ACGIH) – STEL 400ppm. National Institute for Occupational Safety and Health (NIOSH) REL – TWA 980mg/m³ National Institute for Occupational Safety and Health (NIOSH) REL – TWA 400ppm National Institute for Occupational Safety and Health (NIOSH) REL – STEL 1225mg/m³ National Institute for Occupational Safety and Health (NIOSH) REL – TWA 500ppm.

Name of Substance: Hydrogen Peroxide, 30% w/w

American Conference of Governmental Industrial Hygienists (ACGIH) – TWA 1.4mg/m³. American Conference of Governmental Industrial Hygienists (ACGIH) – TWA 1ppm. Occupational Safety and Health Administration (OSHA) PEL – TWA 1.4mg/m³. Occupational Safety and Health Administration (OSHA) PEL – TWA 1ppm. Immediately Dangerous to Life or Health (IDLH) – 75ppm National Institute for Occupational Safety and Health (NIOSH) REL – TWA 1.4mg/m³. National Institute for Occupational Safety and Health (NIOSH) REL – TWA 1ppm.

Additional Information: Adequate ventilation to control airborne concentrations below the exposure guidelines/limits.

8.2 Exposure Controls

General Information

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances.

Appropriate measures include: Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Eye washes and showers for emergency use.

Read in conjunction with the Exposure Scenario for your specific use contained in the Annex.

Do not ingest. If swallowed then seek immediate medical assistance. If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374 and provide employee skin care programmes.

Occupational Exposure Controls

Personal Protective Equipment

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Eye Protection

Monogoggles (EN166)

Chemical splash goggles (chemical monogoggles).

Body protection

Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant. Wear antistatic and flame retardant clothing.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapors [Type A boiling point > 65°C (149°F)] meeting EN14387. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

Thermal hazards

Not applicable.

Environmental Exposure Controls

Environmental exposure control measures

Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.





9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

9.1.1. Appearance

Physical State: Liquid

Colorless Colorless

Odor: Alcohol odor

9.1.2. Basic data

Melting Point: -89^oC

Boiling Point: 82^oC

Flash Point: 12⁰ C

Autoignition Temperature: 399°C

Lower Explosion Limit (vol %): >0.6 % (v/v)

Upper Explosion Limit (vol %): <60 % (v/v)

Vapour Pressure: 44 hPa at 20°C

Relative density: 0.80 at 20°C

Specific Gravity (gr/cm³): 0.80 - 0.85 at 20° C

Bulk Density (kg/m³): Not available

Solubility: Miscible with water

Viscosity, kinematic: 2.532 mm²/s at 25°C

Viscosity, dynamic: 2.1 mPa.s at 25°C

9.2 Other Information: No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Not applicable.

The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

10.2 Chemical stability

Stable under normal conditions of use.

10.3 Possibility of Hazardous Reactions

Data not available.

10.4 Conditions to Avoid

Avoid heat, sparks, open flames, direct sunlight, high temperature and other ignition sources.

10.5 Incompatible Materials

Ammonia, strong acids and strong oxidising agents.

10.6 Hazardous Decomposition Products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Name of substance: Isopropyl alcohol

Basis for Assessment: Information given is based on product testing, and/or similar products, and/or

components.

Routes of Exposure: Exposure may occur via inhalation, ingestion, eye contact, and accidental ingestion.

Acute Oral Toxicity: Not classified.
Acute Dermal Toxicity: Not classified.
Acute Inhalation Toxicity: Not classified.

LD50 oral rat: 5840 mg/kg body weight – 14 days.

LD50 dermal rabbit: 16400 mg/kg body weight – 14 days.

LC50 inhalation rat: > 10000ppm - 14 days. ATE US (oral): 5840 mg/kg body weight. ATE US (dermal): 16400 mg/kg body weight.

Skin Corrosion/Irritation: Not classified.
Serious Eye Damage/Irritation: Not classified.

Respiratory Irritation: Not classified. **Sensitisation:** Not expected to be a sensitiser.

Aspiration hazard: Not classified. Mutagenicity: Not mutagenic. Carcinogenicity: Not classified.

Reproductive and Developmental Toxicity: Not classified.

Specific target organ toxicity - single exposure: May cause respiratory irritation.

Specific target organ toxicity - repeated exposure: Not classified.

Name of Substance: Hydrogen Peroxide, 30% w/w

Basis for Assessment: Information given is based on product testing, and/or similar products, and/or

components.

Routes of Exposure: Exposure may occur via inhalation; skin and eye contact.

Acute toxicity: Not classified.

ATE US (oral): 500 mg/kg body weight.

ATE US (gases): 4500ppmV/4h. ATE US (vapors): 11 mg/l/4h ATE US (dust, mist): 1.5 mg/l/4h

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye damage.

Respiratory Irritation: Not classified. **Sensitisation:** Not expected to be a sensitiser.

Aspiration hazard: Not classified. **Mutagenicity:** Not mutagenic.

Reproductive and Developmental Toxicity: Not classified.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Name of substance: Isopropyl alcohol

General: Not classified as dangerous for the environment according to the criteria of EC Regulation No. 1272/2008.

Ecology – **air:** Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Photo oxidation in the air. Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Ecology – water: Not harmful to crustacea. Not harmful to fishes. Groundwater pollutant. Inhibition of activated sludge. Not harmful to algae. Not harmful to bacteria.

LC50 fish: 9640 - 10000 mg/l

Name of Substance: Hydrogen Peroxide, 30% w/w

No additional information available.

12.2 Persistence and Degradability

Name of substance: Isopropyl alcohol

Readily biodegradable in water. Biodegradable in the soil under anaerobic conditions.

Biochemical Oxygen Demand (BOD): 1.19 g O₂/g substance.

Chemical Oxygen Demand (COD): 2.23 g O₂/g substance.

ThOD: 2.4 O₂/g

Name of Substance: Hydrogen Peroxide, 30% w/w

Not established.

12.3 Bioaccumulative potential

Name of substance: Isopropyl alcohol

Log Pow: 0.05 (Weight of evidence approach, 25^oC)

Has low potential for bioaccumulation (Log Kow < 4).

Name of Substance: Hydrogen Peroxide, 30% w/w

Not established.

12.4 Mobility in soil

Name of substance: Isopropyl alcohol

Surface tension: 0.021N/m (25° C).

Log Koc: 0.185 - 0.541 (calculated value).

Ecology – soil: Highly mobile in soil.

Name of Substance: Hydrogen Peroxide, 30% w/w

No additional information available.

12.5 Results of PBT and vPvB assessment

Name of substance: Isopropyl alcohol

The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

Name of Substance: Hydrogen Peroxide, 30% w/w

The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

12.6 Other adverse effects

Name of substance: Isopropyl alcohol

None known.

Name of Substance: Hydrogen Peroxide, 30% w/w

None known.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Material Disposal: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to contaminate soil or water.

Container Disposal: Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send to drum recoverer or metal reclaimer.

Local Legislation: Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be in compliance.

14. TRANSPORT INFORMATION

14.1 Proper Shipping Name: Flammable Liquid N.O.S. (Isopropyl Alcohol)

14.2 LAND TRANSPORT

UN number: 1993 RID-class: 3 ADR class: 3 Packing group: II

14.3 SEA TRANSPORT

UN number: 1993 EmS: F-E, S-D IMDG class: 3 IMDG packing group: II

14.4 AIR TRANSPORT

UN number: 1993

IATA/ICAO class: 3 Packing group: II

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

H225: Highly flammable liquid and vapour.

H271: May cause fire or explosion; strong oxidizer.

H302: Harmful if swallowed.

H303: May be harmful if swallowed.

H304: May be fatal if swallowed and enters airways.

H314: Causes severe skin burns and eye damage.

H320: Causes eye irritation.

H332: Harmful if inhaled.

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

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.

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.