



## SAFETY DATA SHEET

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

Date last modified: 30 November 2019 - Version 7.0

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

#### 1.1 Product Identifier

**Product Name:** PURIFIER DISC CLEANER

**Product Code #:** 833026 (30 lt)

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

**Intended Use:** Industrial applications; Cleaning agent for machinery and equipment.

**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.

#### Labeling



Symbol :

**Signal Word: DANGER**

Skin Corrosion 1B

### 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



**GHS05**

**Signal Word: DANGER**

#### Hazard Statements

H314: Causes severe skin burns and eye damage.

#### Precautionary Statements

##### Prevention:

P260: Do not breathe fume/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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.

P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P361: Remove/Take off immediately all contaminated clothing.

P301 + P330 + P331: IF SWALLOWED: rinse mouth. DO NOT induce vomiting.

P332 + P313: IF skin irritation occurs: Get medical advice/attention.  
P337 + P311: If eye irritation persists: Call a POISON CENTER or doctor/physician.  
P391: Collect spillage.

**Storage:**

P405 Store locked up.

**Disposal:**

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

**2.3 Other Hazards**

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**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: C



**Corrosive (C)**

**Risk Phrases - R-phrases:**

R34: Causes burns.

**Safety Phrases - 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.

S45: In case of accident or if you feel unwell seek medical advice immediately (show the label whenever possible).

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### **3.1 Chemical Composition:**

<b>Ingredients</b>	<b>CAS Number</b>	<b>Proportion</b>	<b>Classification*</b>
Phosphoric Acid (Solution 85%)	7664-38-2	5% - 20%	H314.
2-Butoxyethanol	111-76-2	5% - 30%	H302; H312; H315; H339; H352.
Components which do not contribute to the classification of the product	-	40% - 80%	-

\*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**

Do not leave affected persons unattended.

Personal protection for the First Aider.

Involve doctor immediately.

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Provide oxygen treatment if affected person has difficulty breathing.

##### **After inhalation**

Take affected persons into fresh air and keep quiet.

Supply fresh air.

Call a doctor immediately.

##### **After skin contact**

Immediately wash with water and soap and rinse thoroughly.

Call a doctor immediately.

##### **After eye contact**

Rinse opened eye for several minutes under running water.

Call a doctor immediately.

##### **After swallowing**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

NOTE: Never give an unconscious person anything to drink.

#### **4.2 Most important symptoms and effects, both acute and delayed**

Causes severe skin burns and eye damage.

Gastric or intestinal disorders.

#### **4.3 Indication of any immediate medical attention and special treatment needed**

Medical supervision for at least 48 hours.

### **5. FIRE-FIGHTING MEASURES**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing agents**

The product is not flammable.

Use fire extinguishing methods suitable to surrounding conditions.

CO<sub>2</sub> (Carbon Dioxide), powder or water spray.

Fight larger fires with water spray or alcohol resistant foam.

##### **For safety reasons unsuitable extinguishing agents**

Water with full jet

#### **5.2 Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Phosphorus oxides (e.g. P<sub>2</sub>O<sub>5</sub>).

#### **5.3 Advice for fire-fighters**

##### **Protective equipment**

Wear self-contained respiratory protective device.

Wear fully protective suit.

##### **Additional information**

Cool endangered receptacles with water spray.

### **6. ACCIDENTAL RELEASE MEASURES**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Mount respiratory protective device.

#### **6.2 Environmental precautions**

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

#### **6.3 Methods and material for containment and cleaning up**

Absorb liquid components with liquid-binding material.

Use neutralizing agent.

Dispose contaminated material as waste according to Chapter 13.

Ensure adequate ventilation.

#### **6.4 Reference to other sections**

See Chapter 8 for information on personal protection equipment.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Keep receptacles tightly sealed.  
Ensure good ventilation/exhaustion at the workplace.  
When diluting always pour product into water and not vice versa.

### Information about fire - and explosion protection

No special measures required.

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

#### Requirements to be met by storerooms and receptacles

Store only in the original receptacle.  
Use polyolefin receptacles.  
Provide acid-resistant floor.  
Suitable material for receptacles and pipes: Stainless steel.

#### Information about storage in one common storage facility

Store away from reducing agents.  
Store away from metals.  
Do not store together with alkalis (caustic solutions).

#### Further information about storage conditions

Keep container tightly sealed.

#### Recommended storage temperature

<75%: no need in heating

### 7.3 Specific end use(s)

Cleaning product for industrial use only.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Ingredients with limit values that require monitoring at the workplace

Name of Substance: Phosphoric Acid

IOELV (EU)	Short term value: 2 mg/m <sup>3</sup>
	Long-term value: 1 mg/m <sup>3</sup>
PEL (USA)	1 mg/m <sup>3</sup>
REL (USA)	Short term value: 3 mg/m <sup>3</sup>
	Long-term value: 1 mg/m <sup>3</sup>
TLV (USA)	Short term value: 3 mg/m <sup>3</sup>
	Long-term value: 1 mg/m <sup>3</sup>

#### DNELs

For workers:

Long-term-local effects (inhalation) DNEL: 1 mg/m<sup>3</sup>

Acute local effects (inhalation) DNEL: 2 mg/m<sup>3</sup>

For general population:

Long-term-local effects (inhalation) DNEL: 0.73 mg/m<sup>3</sup>

### **PNECs**

Not applicable

Phosphoric acid toxicity is related to its acidic nature. A generic PNEC (water) cannot be derived as the effects are highly depending on the pH of the receiving water and its buffer capacity highly variable.

### **Name of Substance: 2-Butoxyethanol**

#### **Skin Designation (OEL (EU))**

The substance can be absorbed through the skin.

TWA value 98 mg/m<sup>3</sup> ; 20 ppm (OEL (EU)) - indicative

STEL value 246 mg/m<sup>3</sup> ; 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<sup>3</sup>

consumer:

Long-term exposure- systemic effects, Inhalation: 49 mg/m<sup>3</sup>

## **8.2 Exposure controls**

### **General protective and hygienic measures**

The usual precautionary measures are to be adhered to when handling chemicals.

Do not eat or drink while working.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

### **Respiratory protection**

Use suitable respiratory protective device only when aerosol or mist is formed.

In case of brief exposure or low pollution use respiratory filter device.

In case of intensive or longer exposure use self-contained respiratory protective device.

Short term filter device: ABEK+P

Filter A/P2 (EN 14387, EN 143)

### Protection of hands

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

### Material of gloves

Butyl rubber, BR (0.7 mm)  
Nitrile rubber, NBR (0.4 mm)  
Chloroprene rubber, CR (0.5 mm)  
Fluorocarbon rubber (Viton)  
Natural rubber, NR  
Neoprene gloves

### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. (EN 374)

### Not suitable are gloves made of the following materials

Leather gloves.

### Eye protection

Tightly sealed goggles (EN 166).

### Body protection

Acid resistant protective clothing.  
Boots.

### Limitation and supervision of exposure into the environment

Avoid discharging of phosphoric acid solutions into municipal wastewater, surface water or soils, when such discharges are expected to cause significant pH changes.

### Risk management measures

Regular control of the pH value previous to or during discharges into open waters is required. Discharges should be carried out as to minimize pH changes in receiving surface waters. In general most aquatic organisms can tolerate pH values in the range of 6-9.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

#### 9.1.1. Appearance

**Physical State:** Non - transparent liquid

**Color:** Colorless



**Odor:** Slight ethereal

### 9.1.2. Basic data

**Boiling Point Range:** >100°C  
**Melting Point Range:** <0°C  
**Flash Point:** None  
**Autoignition Temperature:** Not Available  
**Lower Explosion Limit (vol %):** Not Available  
**Upper Explosion Limit (vol %):** Not Available  
**Vapour Pressure:** Not Available  
**Relative vapor density (air=1):** Not Available  
**Solubility in water:** Absolute  
**Specific Gravity (gr/cm<sup>3</sup>):** 1.05 – 1.10 at 20°C  
**Bulk Density (kg/m<sup>3</sup>):** Not Available  
**Viscosity:** Not Available  
**pH Value:** 1.0 – 2.0

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

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Corrosive action on metals.  
Reacts with reducing agents.  
Reacts with alkali (lyes).  
Ammonia (NH<sub>3</sub>), fluorine, sulphur trioxide (SO<sub>3</sub>), phosphorus pentoxide (P<sub>2</sub>O<sub>5</sub>).

### 10.2 Chemical stability

No decomposition if used and stored according to specifications.

### 10.3 Possibility of hazardous reactions

Reacts with metals forming hydrogen.  
Reacts with alkali (lyes).

### 10.4 Conditions to avoid

To avoid thermal decomposition do not overheat.

### 10.5 Incompatible materials

Alkalis.  
Metals.

## 10.6 Hazardous decomposition products

Phosphorus oxides (e.g. P<sub>2</sub>O<sub>5</sub>).

# 11. TOXICOLOGICAL INFORMATION

## 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: Phosphoric Acid****Acute toxicity****LD/LC50 values relevant for classification**

Oral LD50 2600 mg/kg (rat) (equivalent to OECD 423).

**Specific symptoms in biological assay**

Phosphoric acid is classified as corrosive to the skin, therefore, no need to perform an acute dermal and an acute inhalative toxicity tests.

**Primary irritant effect**

**on the skin:** Caustic effect on skin and mucous membranes.

**on the eye:** Strong caustic effect.

**Sensitization**

Phosphoric acid is classified as skin corrosive, thus a further assessment for skin sensitization is not necessary.

**Additional toxicological information:**

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

**Toxicokinetics, metabolism and distribution**

This substance is not considered to have bioaccumulative potential as it is highly soluble in water and phosphate levels in the body are regulated via homeostasis.

For risk assessment purposes oral absorption is considered to be 50-100%, inhalation absorption 100% and dermal absorption 50-100%.

Wide distribution throughout the body is to be expected and excretion will be predominantly via urine.

Supporting studies show increased phosphorus retention in bone and increased urinary phosphorus excretion after prolonged dietary administration of phosphoric acid and support the initial toxicokinetic assessment.

**Repeated dose toxicity**

Oral NOAEL 250 mg/kg bw/day (rat) (OECD 422 (subchronic))

should not be classified for STOT - repeated exposure.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)****Mutagenicity:**

None

(acc. to OECD 471, OECD 473, OECD 476 tests)

**Carcinogenicity:**

no data available

(no carcinogenicity study needs to be performed as this substance is not genotoxic)

**Toxicity for reproduction:**

no classification is necessary

reproductive toxicity: NOAEL 500 mg/kg bw/day ; rat; oral (OECD 422)

developmental toxicity: NOAEL 410 mg/kg bw/day ; rat; oral

maternal toxicity: NOAEL 410 mg/kg bw/day ; rat; oral (equivalent to OECD 414)

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Name of Substance: 2-Butoxyethanol**

**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.

**Name of Substance: Phosphoric Acid**

**Aquatic toxicity**

Phosphoric acid toxicity is related to its acidic nature and, therefore, is more related to concentration than to dose.

EC50/48 h (static) >100 mg/L (*Daphnia magna*) (OECD 202, freshwater)

EC50/72 h (static) >100 mg/L (algae) (OECD 201, freshwater)

Median lethal pH 96h 3-3,25 (*Bluegill fish*)

Fish mortality is caused by low pH values.

## 12.2. Persistence and degradability

### Name of Substance: 2-Butoxyethanol

Assessment biodegradation and elimination (H<sub>2</sub>O):

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: Phosphoric Acid

The substance is inorganic; therefore no biodegradation tests are applicable.

Phosphoric acid dissociates in water into H<sub>3</sub>O<sup>+</sup>, H<sub>2</sub>PO<sub>4</sub><sup>-</sup>, HPO<sub>4</sub><sup>-</sup> - ions, which cannot be further degraded.

#### Other information:

The product should not get in high quantities into waste water because it may act as a plant nutrient and cause eutrophication.

## 12.3. Bioaccumulative potential

### Name of Substance: 2-Butoxyethanol

Assessment bioaccumulation potential:

Significant accumulation in organisms is not to be expected.

### Name of Substance: Phosphoric Acid

Does not accumulate in organisms

This substance is highly water soluble and dissociating.

Phosphoric acid dissociates in water into H<sub>3</sub>O<sup>+</sup>, H<sub>2</sub>PO<sub>4</sub><sup>-</sup>, HPO<sub>4</sub><sup>-</sup> - ions, which are ubiquitous in the environment.

Phosphoric acid is absorbed in form of phosphate anions. This anion is an essential component of the body.

## 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: Phosphoric Acid

This substance is highly water soluble and dissociating.

When spilled onto soil, phosphoric acid will infiltrate downward and will be partially neutralized by dissolving some of the soil material. On reaching the ground table phosphoric acid will be dispersed and diluted. Therefore, the environmental assessment should be limited to the aquatic compartment.

**Behaviour in sewage processing plants:**

Phosphoric acid is of low toxicity to microorganisms, since in sewage treatment plants the microorganisms are essentially exposed to mainly  $\text{H}_2\text{PO}_4^-$  and  $\text{HPO}_4^-$  ions, which are an essential nutrient for them, and not to parent phosphoric acid or to low pH values.

**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 product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative). Self classification.

**Name of Substance: Phosphoric Acid**

**PBT:** No assessment is required for inorganic substances.

**vPvB:** No assessment is required for inorganic substances.

**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.

**Name of Substance: Phosphoric Acid**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

**12.7. Additional information****Name of Substance: 2-Butoxyethanol**

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****Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in

accordance with Local Authority requirements.

### **Uncleaned packaging**

#### **Recommendation:**

Empty contaminated packaging thoroughly. They may be recycled after thorough and proper cleaning.

Packaging that may not be cleansed are to be disposed of in the same manner as the product.

Disposal must be made in accordance with Local Authority requirements.

#### **Recommended cleansing agents**

Water, if necessary together with cleansing agents.

## **14. TRANSPORT INFORMATION**

### **14.1 Proper shipping name: Phosphoric Acid, Solution**

#### **14.2 LAND TRANSPORT**

UN number: 1805 RID-class: 8  
ADR class: 8

#### **14.3 SEA TRANSPORT**

UN number: 1805 EmS: F-A, S-B  
IMDG class: 8  
IMDG packing group: III

#### **14.4 AIR TRANSPORT**

UN number: 1805  
IATA/ICAO class: 8 Packing group: III

## **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.  
H314: Causes severe skin burns and eye damage.  
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).  
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.