

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : COLOMBO MARINE NITRATE-1
Product code : MNO31

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

Application : Consumer product (SU21). Maintenance of aquarium and pond.

1.3. Details of the supplier of the safety data sheet

Supplier : Colombo BV
Dorpsweg 11
3257 LB Ooltgensplaat, The Netherlands
Telephone : + 31 187-639351
E-mail : r.vanheeswijk@colombo.nl
Website : www.colombo.nl

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

NL - Telephone : + 31 187-639351 (During office hours only)

EMERGENCY TELEPHONE NUMBER (in the UK and Ireland for healthcare professionals only):

National Poisons Information Service +44-344 892 0111 (24/7)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification : Skin irritation, category 2. Eye irritation, category 2.
(1272/2008/EC)

2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :



Signal word : Warning

H- and P-phrases : None.

Additional labelling: none.

Other information : The product does not need to carry all label elements required by Article 17 of Regulation (EC) No 1272/2008 on the basis of Annex I, point 1.5.2.1. Exemption for packages where the contents do not exceed 125 ml.

2.3. Other hazards

Human health hazards : Causes skin irritation. Causes serious eye irritation.
Physical/chemical hazards : Reacts vigorously in contact with alkalines. Strong heat development possible.
Environmental hazards : Does not contain PBT or vPvB substances.
Other information : Keep out of reach of children.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS *

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	REACH nr.	OEL
Sulphuric acid Skin Corr. 1A H314	10 - < 15	7664-93-9	231-639-5	01-2119458838-20	#

Reference is made to chapter 16 for full text of each relevant H phrase. Substance(s) with an Occupational Exposure Limit are marked with #. Occupational exposure limit(s) are listed in section 8.

SECTION 4 FIRST AID MEASURES *

4.1. Description of first aid measures

First aid measures

- Inhalation : Move victim into fresh air. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation persists.
- Eye contact : Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor.
- Ingestion : Do not induce vomiting. Rinse the mouth, give 1 glass of water at most. Do not give milk. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

4.2. Most important symptoms and effects, both acute and delayed

Effects and symptoms

- Inhalation : May cause irritation to respiratory airways and coughing.
- Skin contact : Irritant. May cause redness.
- Eye contact : Irritant. May cause redness and pain.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians : None known.

SECTION 5 FIREFIGHTING MEASURES *

5.1. Extinguishing media

Extinguishing media

- Suitable : Carbon dioxide (CO₂). Alcohol resistant foam. Dry chemical. Water fog.
- Not suitable : None known.

5.2. Special hazards arising from the substance or mixture

- Special exposure hazards : None known. Non flammable product.
- Hazardous thermal decomposition products : May form dangerous gases in case of fire.

5.3. Advice for firefighters

Special protective equipment for fire-fighters : Wear full protective clothing and self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material.

6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. Large spills: contain with dike.

Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Carefully neutralise residues with soda. Absorb residues in sand or other inert material. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections : For guidance on selection of personal protective equipment see section 8. For guidance on disposal of spilled material see section 13.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool, dry and well-ventilated place (< 35 °C).

Recommended packaging : Keep only in the original container.

Non recommended packaging : Steel (except stainless steel).

7.3. Specific end use(s)

Use : Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Occupational exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m ³)	STEL 15 min (mg/m ³)	Comments
Sulphuric acid	GB	0,05	-	Mist
Sulphuric acid		0,05	0,01	SCOEL (2007)

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term	DNEL, long-term

		Local effect	Systemic effect	Local effect	Systemic effect
Sulphuric acid	Inhalation	0,1 mg/m ³		0,05 mg/m ³	

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Sulphuric acid	Water	0,0025 mg/l	0,00025 mg/l	
	Sediment	0,002 mg/kg	0,0002 mg/kg	
	STP			8,8 mg/l

8.2. Exposure controls

Engineering measures : Comply with standard precautionary measures for working with chemicals.
 Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

- Body protection : Use of specific protective industrial clothing is not required under normal conditions of use.
- Respiratory protection : Take care of sufficient ventilation.
- Hand protection : Wear appropriate safety gloves in accordance with EN 374. Neoprene. 0,75 mm. Indication of permeation breakthrough time: 6 hours.
- Eye protection : Wear appropriate safety glasses with side shields, in accordance with EN 166.
- Thermal hazards : Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES *

9.1. Information on basic physical and chemical properties

Appearance	: Liquid.	
Colour	: Colourless.	
Odour	: Characteristic.	
Odour threshold	: Not known.	
pH	: 0.5	
Acid reserve (g NaOH/100 ml)	: Not known.	
Solubility in water	: Soluble.	
Partition coefficient (n-octanol/water)	: Not applicable.	
Flash point	: > 100 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: Not known.	Does not contain substances with a known auto ignition temperature.
Boiling point/boiling range	: 100 °C	
Melting point/melting range	: < 0 °C	
Explosive properties	: None known.	Does not contain explosives.
Explosion limits (in air)	: Not known.	
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not known.	
Viscosity (40°C)	: Not relevant.	The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C)	: 2300 Pa	
Vapour density (20°C)	: Not relevant.	The solvent content of this product is less than 1%.
Relative density (20°C)	: 1.087 g/ml	
Evaporation rate	: < 1	(n-butyl acetate = 1)

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : Can form oxyhydrogen (H₂ and O₂) in contact with base metals.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : Keep away from bases.

10.6. Hazardous decomposition products

Hazardous decomposition products : May include and are not limited to: Sulfur trioxide ; Sulphur dioxide

SECTION 11 TOXICOLOGICAL INFORMATION *

11.1. Information on toxicological effects

Inhalation

- Acute toxicity : Calculated LC50: > 2,343 mg/l. Ingredients of unknown toxicity: < 1 %. ATE: > 5 mg/l. No specific effects and/or symptoms are known.
- Corrosion/irritation : No specific effects and/or symptoms are known. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain respiratory sensitisers. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Skin contact

- Acute toxicity : Ingredients of unknown toxicity: 15 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Irritant. May cause redness.
- Sensitisation : Does not contain skin sensitisers. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Eye contact

- Corrosion/irritation : Irritant.

Ingestion

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property	Method	Test animal
Sulphuric acid	Mutagenicity	Negative	-----
	Skin irritation	Corrosive.	

Genotoxicity - estimate	Not genotoxic		
Genotoxicity - in vitro	Genotoxic		
Skin sensitisation - estimate	Not sensitizing		
Mutagenicity - estimate	Not mutagenic		
Eye irritation	Severely irritant		Rabbit
LD50 (oral)	2140 mg/kg bw	-----	Rat
LC50 (inhalation)	375 mg/m3		Rat
NOAEL (developmental toxicity, inh.)	> 19,3 mg/m3	OECD 414	Mouse

SECTION 12 ECOLOGICAL INFORMATION *

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Calculated LC50 (fish): 113 mg/l. Calculated EC50 (waterflea): 707 mg/l. Contains < 1 % of components with unknown hazards to the aquatic environment. Not classified - based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Persistence – degradability : No specific information known.

12.3. Bioaccumulative potential

Bioaccumulative potential : No bioaccumulation is expected.

12.4. Mobility in soil

Mobility : If product enters soil, it will be highly mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Does not contain PBT or vPvB substances.

12.6. Other adverse effects

Other information : Not applicable.

SECTION 13 DISPOSAL CONSIDERATIONS *

13.1. Waste treatment methods

Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as chemical waste. Dispose waste to an official chemical waste depot.

Additional warning : None.

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 complied with.

SECTION 14 TRANSPORT INFORMATION *

14.1. UN number

UN nr. : None.

14.2. UN proper shipping name

Transport name : Not regulated.

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : This product is not classified according to ADR/RID/ADN.

IMDG (sea)

Class : This product is not classified according to IMDG.

Marine pollutant : No

IATA (air)

Class : This product is not classified according to IATA.

14.6. Special precautions for user

Other information : Country specific variations may apply.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments.

SECTION 15 REGULATORY INFORMATION *

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Community regulations : Regulation (EC) No 830/2015 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

: This product is exempted from classification as "Corrosive" on basis of section 3.2.3.2.1 of Annex I of Regulation EC No. 1272/2008.

Directive 2012/18/EU : Not regulated.

15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EC) No 830/2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

Full text of H-phrases mentioned in section 3:

H314 Causes severe skin burns and eye damage.

Full text of hazard classes mentioned in section 3:

Skin Corr. 1B : Skin corrosive, category 1B.

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ATE Acute Toxicity Estimate

BCF Bioconcentration factor

DNEL Derived no-effect level

ECETOC TRA European centre for ecotoxicology and toxicology of chemicals. Targeted risk assessment

EU	European Union
EUSES	European Union System for the Evaluation of Substances
IBC code	Intermediate Bulk Container
LD50 LC50	Lethal Dose/Concentration for 50% of a population
NOAEL	No Observed (Adverse) Effect Level
NOEC	No observed effect concentration
OEL	Occupational exposure limit
PBT	Persistent, Bioaccumulative and Toxic
PC	Chemical product category
PNEC	Predicted no-effect concentration
STP	Sewage Treatment Plant
SU	Sector of Use
SVHC	Substance of very high concern
TWA/STEL	Time-Weighted Average/Short Term Exposure Limit
vPvB	Very Persistent and Very Bioaccumulative

Number format : "," used as decimal separator.