

## Safety Data Sheet COMBAT 444



Safety Data Sheet dated 5/6/2023, version 8

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: COMBAT 444

Trade code: 4810444

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

Recommended use:

Additive

1.3. Details of the supplier of the safety data sheet

Company:

SAN MARCO GROUP S.P.A.

Via Alta 10

30020 MARCON (VE) - Italy -

Tel.+39 041 4569322

Fax. +39 041 5950153

Competent person responsible for the safety data sheet:

sicurezza.prodotti@sanmarcogroup.it

1.4. Emergency telephone number

Technical information: SAN MARCO GROUP SPA +39 041 4569322 (Monday – Friday  
9.00-12.30 ; 13.30-17.00)

### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

⚠ Warning, Skin Irrit. 2, Causes skin irritation.

⚠ Warning, Eye Irrit. 2, Causes serious eye irritation.

⚠ Warning, Skin Sens. 1A, May cause an allergic skin reaction.

⚠ Warning, Aquatic Acute 1, Very toxic to aquatic life.

⚠ Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents / container in accordance with national regulations.

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Special Provisions:

None

Contains

2-octyl-2H-isothiazol-3-one

2-methyl-2H-isothiazol-3-one

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration  $\geq 0.1\%$

Other Hazards:

No other hazards

### SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
$\geq 1\%$ - $< 3\%$	2-octyl-2H-isothiazol-3-one	Index number: 613-112-00-5 CAS: 26530-20-1 EC: 247-761-7	<ul style="list-style-type: none"> <li>⊠ 3.1/2/Inhal Acute Tox. 2 H330</li> <li>⊠ 3.1/3/Dermal Acute Tox. 3 H311</li> <li>⊠ 3.1/3/Oral Acute Tox. 3 H301</li> <li>⊠ 3.2/1 Skin Corr. 1 H314</li> <li>⊠ 3.3/1 Eye Dam. 1 H318</li> <li>⚠ 3.4.2/1A Skin Sens. 1A H317</li> <li>⊠ 4.1/A1 Aquatic Acute 1 H400 M=100.</li> <li>⊠ 4.1/C1 Aquatic Chronic 1 H410 M=100.</li> </ul> EUH071 Specific Concentration Limits: C $\geq 0,0015\%$ : Skin Sens. 1A H317 Acute Toxicity Estimate: ATE - Oral 125 mg/kg bw ATE - Dermal 311 mg/kg bw ATE - Inhalation (Dust/mist) 0,27 mg/l
$\geq 0.0015\%$ - $< 0.005\%$	2-methyl-2H-isothiazol-3-one	CAS: 2682-20-4 EC: 220-239-6	<ul style="list-style-type: none"> <li>⊠ 3.1/2/Inhal Acute Tox. 2 H330</li> <li>⊠ 3.1/3/Dermal Acute Tox. 3 H311</li> <li>⊠ 3.1/3/Oral Acute Tox. 3 H301</li> <li>⊠ 3.2/1B Skin Corr. 1B H314</li> <li>⊠ 3.3/1 Eye Dam. 1 H318</li> <li>⚠ 3.4.2/1A Skin Sens. 1A H317</li> <li>⊠ 4.1/A1 Aquatic Acute 1 H400 M=10.</li> <li>⊠ 4.1/C1 Aquatic Chronic 1 H410 M=1.</li> </ul> EUH071 Specific Concentration Limits: C $\geq 0,0015\%$ : Skin Sens. 1A H317

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#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

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#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

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

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

##### 5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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#### SECTION 6: Accidental release measures

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

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

##### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

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

Wash with plenty of water.

##### 6.4. Reference to other sections

See also section 8 and 13

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#### SECTION 7: Handling and storage

- 7.1. Precautions for safe handling  
 Avoid contact with skin and eyes, inhalation of vapours and mists.  
 Don't use empty container before they have been cleaned.  
 Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.  
 See also section 8 for recommended protective equipment.  
 Advice on general occupational hygiene:  
 Contaminated clothing should be changed before entering eating areas.  
 Do not eat or drink while working.
- 7.2. Conditions for safe storage, including any incompatibilities  
 Keep away from food, drink and feed.  
 Incompatible materials:  
 None in particular.  
 Instructions as regards storage premises:  
 Adequately ventilated premises.
- 7.3. Specific end use(s)  
 None in particular

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#### SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters  
 No occupational exposure limit available  
 DNEL Exposure Limit Values  
 N.A.  
 PNEC Exposure Limit Values  
 N.A.
- 8.2. Exposure controls  
 Eye protection:  
 Use close fitting safety goggles, don't use eye lens.  
 Protection for skin:  
 No special precaution must be adopted for normal use.  
 Protection for hands:  
 Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.  
 Respiratory protection:  
 Not needed for normal use.  
 Thermal Hazards:  
 None  
 Environmental exposure controls:  
 None  
 Appropriate engineering controls:  
 None

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#### SECTION 9: Physical and chemical properties

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

Properties	Value	Method:	Notes
Physical state:	Liquid	--	--
Colour:	Colourless	--	--
Odour:	characteristic	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial	N.A.	--	--

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boiling point and boiling range:			
Flammability:	N.A.	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	7	--	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:		--	--
Solubility in oil:	N.A.	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	0.98 kg/l	--	--
Relative vapour density:	N.A.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

#### 9.2. Other information

No other relevant information

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### SECTION 10: Stability and reactivity

- 10.1. Reactivity  
Stable under normal conditions
- 10.2. Chemical stability  
Stable under normal conditions
- 10.3. Possibility of hazardous reactions  
None
- 10.4. Conditions to avoid  
Stable under normal conditions.
- 10.5. Incompatible materials  
None in particular.
- 10.6. Hazardous decomposition products  
None.

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### SECTION 11: Toxicological information

- 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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Toxicological information of the product:

- COMBAT 444
- a) acute toxicity  
Not classified  
No data available for the product
  - b) skin corrosion/irritation  
The product is classified: Skin Irrit. 2 H315
  - c) serious eye damage/irritation  
The product is classified: Eye Irrit. 2 H319
  - d) respiratory or skin sensitisation  
The product is classified: Skin Sens. 1A H317
  - e) germ cell mutagenicity  
Not classified  
No data available for the product
  - f) carcinogenicity  
Not classified  
No data available for the product
  - g) reproductive toxicity  
Not classified  
No data available for the product
  - h) STOT-single exposure  
Not classified  
No data available for the product
  - i) STOT-repeated exposure  
Not classified  
No data available for the product
  - j) aspiration hazard  
Not classified  
No data available for the product

Toxicological information of the main substances found in the product:

- 2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1
- a) acute toxicity  
ATE - Oral 125 mg/kg bw  
ATE - Dermal 311 mg/kg bw  
ATE - Inhalation (Dust/mist) 0,27 mg/l

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration  $\geq 0.1\%$

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## SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

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The product is classified: Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410

2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia 0.42 mg/l - Duration h: 48 - Notes: OECD 202

Endpoint: EC50 - Species: Algae 0.084 mg/l - Duration h: 72 - Notes: Scenedesmus subspicatus - OECD 201

Endpoint: LC50 - Species: Fish 0.036 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss - OECD 203

Endpoint: NOEC - Species: Daphnia 0.002 mg/l - Notes: 21d - OECD 211

Endpoint: NOEC - Species: Fish 0.022 mg/l - Notes: 28d Oncorhynchus mykiss - OECD 210

Endpoint: NOEC - Species: Algae 0.004 mg/l - Notes: 72d - OECD 201

12.2. Persistence and degradability

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- N.A.
- 12.3. Bioaccumulative potential  
N.A.
- 12.4. Mobility in soil  
N.A.
- 12.5. Results of PBT and vPvB assessment  
vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties  
No endocrine disruptor substances present in concentration  $\geq 0.1\%$
- 12.7. Other adverse effects  
None

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#### SECTION 13: Disposal considerations

- 13.1. Waste treatment methods  
Recover if possible. In so doing, comply with the local and national regulations currently in force.

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#### SECTION 14: Transport information

- 14.1. UN number or ID number
  - ADR-UN number: 3082
  - IATA-Un number: 3082
  - IMDG-Un number: 3082
- 14.2. UN proper shipping name
  - ADR-Shipping Name: col7
  - IATA-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
  - IMDG-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
- 14.3. Transport hazard class(es)
  - ADR-Class: 9
  - ADR-Label: 9
  - ADR - Hazard identification number: 90
  - IATA-Class: 9
  - IATA-Label: 9
  - IMDG-Class: 9
- 14.4. Packing group
  - ADR-Packing Group: III
  - IATA-Packing group: III
  - IMDG-Packing group: III
- 14.5. Environmental hazards
  - ADR-Environmental Pollutant: Yes
  - Marine pollutant: Marine pollutant
  - Most important toxic component: 2-octyl-2H-isothiazol-3-one
- 14.6. Special precautions for user
  - IATA-Passenger Aircraft: 964
  - IATA-Cargo Aircraft: 964
- 14.7. Maritime transport in bulk according to IMO instruments  
N.A.  
ADR: Special provision 375  
IMDG: Special provision 37-14  
IATA: Special provision A197

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#### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Dir. 98/24/EC (Risks related to chemical agents at work)
  - Dir. 2000/39/EC (Occupational exposure limit values)
  - Regulation (EC) n. 1907/2006 (REACH)

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Regulation (EC) n. 1272/2008 (CLP)  
 Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
 Regulation (EU) n. 2020/878  
 Regulation (EU) n. 286/2011 (ATP 2 CLP)  
 Regulation (EU) n. 618/2012 (ATP 3 CLP)  
 Regulation (EU) n. 487/2013 (ATP 4 CLP)  
 Regulation (EU) n. 944/2013 (ATP 5 CLP)  
 Regulation (EU) n. 605/2014 (ATP 6 CLP)  
 Regulation (EU) n. 2015/1221 (ATP 7 CLP)  
 Regulation (EU) n. 2016/918 (ATP 8 CLP)  
 Regulation (EU) n. 2016/1179 (ATP 9 CLP)  
 Regulation (EU) n. 2017/776 (ATP 10 CLP)  
 Regulation (EU) n. 2018/669 (ATP 11 CLP)  
 Regulation (EU) n. 2018/1480 (ATP 13 CLP)  
 Regulation (EU) n. 2019/521 (ATP 12 CLP)  
 Regulation (EU) n. 2020/217 (ATP 14 CLP)  
 Regulation (EU) n. 2020/1182 (ATP 15 CLP)  
 Regulation (EU) n. 2021/643 (ATP 16 CLP)  
 Regulation (EU) n. 2021/849 (ATP 17 CLP)  
 Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

Restriction 75

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)  
 Regulation (EC) nr 648/2004 (detergents).  
 Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1  
 Product belongs to category: E1

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

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### SECTION 16: Other information

Full text of phrases referred to in Section 3:

H330 Fatal if inhaled.  
 H311 Toxic in contact with skin.  
 H301 Toxic if swallowed.  
 H314 Causes severe skin burns and eye damage.  
 H318 Causes serious eye damage.  
 H317 May cause an allergic skin reaction.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 EUH071 Corrosive to the respiratory tract.

Hazard class and hazard category	Code	Description
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3

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Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Skin Corr. 1	3.2/1	Skin corrosion, Category 1
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

This safety data sheet has been completely updated in compliance to Regulation 2020/878. Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

<b>Classification according to Regulation (EC) Nr. 1272/2008</b>	<b>Classification procedure</b>
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1A, H317	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

This document was prepared by a competent person who has received appropriate training.  
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van  
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
ATE: Acute Toxicity Estimate  
ATEmix: Acute toxicity Estimate (Mixtures)  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
CLP: Classification, Labeling, Packaging.  
DNEL: Derived No Effect Level.  
EINECS: European Inventory of Existing Commercial Chemical Substances.

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GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.