

Safety Data Sheet COMBAT 111



Safety Data Sheet dated 26/5/2017, version 12

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

1.1. Product identifier

Mixture identification:

Trade name: COMBAT 111

Trade code: 4810111

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:

COLORIFICIO SAN MARCO 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: COLORIFICIO SAN MARCO 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 Sens. 1, May cause an allergic skin reaction.

⚠ Aquatic Chronic 2, 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:

H317 May cause an allergic skin reaction.

H411 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.

P273 Avoid release to the environment.

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

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

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

Special Provisions:

EUH208 Contains terbutryn. May produce an allergic reaction.

Contains

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

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

None

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2.3. Other hazards

vPvB Substances: None - PBT Substances: None

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
>= 0.5% - < 1%	zinc oxide	Index number: 030-013-00-7 CAS: 1314-13-2 EC: 215-222-5 REACH No.: 01-2119463881-32-XXXX	<ul style="list-style-type: none"> ⚠ 4.1/A1 Aquatic Acute 1 H400 M=1. ⚠ 4.1/C1 Aquatic Chronic 1 H410 M=1.
>= 0.1% - < 0.25%	pyrithione zinc	CAS: 13463-41-7 EC: 236-671-3 REACH No.: 01-2119511196-46-XXXX	<ul style="list-style-type: none"> ⚠ 3.1/3/Oral Acute Tox. 3 H301 ⚠ 4.1/C1 Aquatic Chronic 1 H410 M=10. ⚠ 3.3/1 Eye Dam. 1 H318 ⚠ 4.1/A1 Aquatic Acute 1 H400 M=100. ⚠ 3.1/4/Inhal Acute Tox. 4 H332
>= 0.1% - < 0.25%	terbutryn	CAS: 886-50-0 EC: 212-950-5	<ul style="list-style-type: none"> ⚠ 4.1/A1 Aquatic Acute 1 H400 M=100. ⚠ 4.1/C1 Aquatic Chronic 1 H410 M=100. ⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.4.2/1B Skin Sens. 1B H317
>= 0.05% - < 0.1%	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"> ⚠ 3.1/3/Inhal Acute Tox. 3 H331 ⚠ 3.2/1B Skin Corr. 1B H314 ⚠ 3.3/1 Eye Dam. 1 H318 ⚠ 3.4.2/1A Skin Sens. 1A H317 ⚠ 4.1/A1 Aquatic Acute 1 H400 M=10. ⚠ 4.1/C1 Aquatic Chronic 1 H410 M=1. ⚠ 3.1/3/Dermal Acute Tox. 3 H311 ⚠ 3.1/4/Oral Acute Tox. 4 H302

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.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

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.

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

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.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

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Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

zinc oxide - CAS: 1314-13-2

- OEL Type: ACGIH - TWA(8h): 2 mg/m³ - STEL: 10 mg/m³ - Notes: (R) - Metal fume fever

DNEL Exposure Limit Values

zinc oxide - CAS: 1314-13-2

Consumer: 0.83 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 8.3 mg/kg - Consumer: 8.3 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 2.5 mg/m³ - Consumer: 1.3 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

zinc oxide - CAS: 1314-13-2

Target: Fresh Water - Value: 0.0206 mg/l

Target: Marine water - Value: 0.0061 mg/l

Target: Freshwater sediments - Value: 117.8 mg/kg

Target: Marine water sediments - Value: 56.5 mg/kg

Target: Soil (agricultural) - Value: 35.6 mg/kg

Target: Microorganisms in sewage treatments - Value: 0.052 mg/l

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: liquid

Colour: colourless

Odour: characteristic

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Solid/gas flammability: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

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Flash point:	N.A.
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	1.14 kg/l
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.
9.2. Other information	
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

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.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the product:
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 - a) acute toxicity
Not classified
No data available for the product
 - b) skin corrosion/irritation
Not classified
No data available for the product
 - c) serious eye damage/irritation
Not classified
No data available for the product
 - d) respiratory or skin sensitisation
The product is classified: Skin Sens. 1 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

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- 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:
N.A.

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 Chronic 2 - H411

zinc oxide - CAS: 1314-13-2

terbutryn - CAS: 886-50-0

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

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. Other adverse effects

None

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.

SECTION 14: Transport information

14.1. UN number

ADR-UN number: 3082

IATA-Un number: 3082

IMDG-Un number: 3082

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

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- 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: | terbutryn |
- 14.6. Special precautions for user
- | | |
|------------------------------|-----|
| ADR-Tunnel Restriction Code: | (E) |
| IATA-Passenger Aircraft: | 964 |
| IATA-Cargo Aircraft: | 964 |
- limited quantity:
5 L
IMDG-EMS: F-A ,S-F
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.
- ADR: Special provision 375
IMDG: Special provision 37-14
IATA: Special provision A197

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)
 - Regulation (EC) n. 1272/2008 (CLP)
 - Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 - Regulation (EU) 2015/830
 - 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)
- 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:
No restriction.
- 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, E2

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15.2. Chemical safety assessment

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

SECTION 16: Other information

Full text of phrases referred to in Section 3:

- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H301 Toxic if swallowed.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H331 Toxic if inhaled.
- H314 Causes severe skin burns and eye damage.
- H311 Toxic in contact with skin.

Hazard class and hazard category	Code	Description
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Skin Sens. 1B	3.4.2/1B	Skin Sensitisation, Category 1B
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training.

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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.
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.
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.