

Safety Data Sheet ZEUS ORO



Safety Data Sheet dated 17/3/2016, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: ZEUS ORO

Trade code: N736190

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

Recommended use:

Coating material

1.3. Details of the supplier of the safety data sheet

Company:

NOVACOLOR S.R.L

Via U. Aldrovandi, 10

47122 Forlì (FC) - Italy -

Tel. +39 0543 401840

Fax. +39 0543 414585

Competent person responsible for the safety data sheet:

reach@novacolor.biz

1.4. Emergency telephone number

Technical information: NOVACOLOR SRL +39 0543 401840 (Monday – Friday 8.00-12.00 ;
13.30-17.30)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

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

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:

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

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

Special Provisions:

None

Contents

2-methyl-2H-isothiazol-3-one: May produce an allergic reaction.

Safety Data Sheet

ZEUS ORO

1,2-benzisothiazol-3(2H)-one: May produce an allergic reaction.
 Special provisions according to Annex XVII of REACH and subsequent amendments:
 None
 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
>= 10% - < 12.5%	Copper	CAS: 7440-50-8 EC: 231-159-6	 3.1/4/Oral Acute Tox. 4 H302  4.1/A1 Aquatic Acute 1 H400 M=10.  4.1/C2 Aquatic Chronic 2 H411 M=10.
>= 3% - < 5%	zinc powder - zinc dust (stabilized)	Index number: 030-002-00-7 CAS: 7440-66-6 EC: 231-175-3	 4.1/A1 Aquatic Acute 1 H400  4.1/C1 Aquatic Chronic 1 H410
>= 0.25% - < 0.5%	triethylamine	Index number: 612-004-00-5 CAS: 121-44-8 EC: 204-469-4	 2.6/2 Flam. Liq. 2 H225  3.2/1A Skin Corr. 1A H314  3.1/4/Oral Acute Tox. 4 H302  3.1/4/Dermal Acute Tox. 4 H312  3.1/4/Inhal Acute Tox. 4 H332
>= 0.005% - < 0.05%	1,2-benzisothiazol-3(2H)-one	Index number: 613-088-00-6 CAS: 2634-33-5 EC: 220-120-9	 3.1/2/Inhal Acute Tox. 2 H330  3.2/2 Skin Irrit. 2 H315  3.3/1 Eye Dam. 1 H318  3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317  3.1/4/Oral Acute Tox. 4 H302  4.1/A1 Aquatic Acute 1 H400 M=1.  4.1/C2 Aquatic Chronic 2 H411 M=1.
>= 0.005% - < 0.05%	2-methyl-2H-isothiazol-3-one	CAS: 2682-20-4 EC: 220-239-6	 3.1/3/Oral Acute Tox. 3 H301  3.2/1B Skin Corr. 1B H314  3.4.2/1A Skin Sens. 1A H317  3.3/1 Eye Dam. 1 H318  3.1/2/Inhal Acute Tox. 2 H330

Safety Data Sheet

ZEUS ORO

			 4.1/A1 Aquatic Acute 1 H400 M=1.  4.1/C2 Aquatic Chronic 2 H411 M=1.
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SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

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

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

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 all sources of ignition.

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

Safety Data Sheet

ZEUS ORO

- 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.
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
triethylamine - CAS: 121-44-8
- OEL Type: EU - LTE(8h): 8,4 mg/m³, 2 ppm - STE: 12,6 mg/m³, 3 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)
- OEL Type: ACGIH - LTE(8h): 1 ppm - STE: 3 ppm - Notes: Skin, A4 - Visual impair, URT irr
- DNEL Exposure Limit Values
Copper - CAS: 7440-50-8
Worker Professional: 273 mg/kg - Consumer: 273 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
Worker Professional: 20 mg/m³ - Consumer: 20 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Professional: 137 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
- zinc powder - zinc dust (stabilized) - CAS: 7440-66-6
Worker Professional: 5 mg/m³ - Consumer: 2.5 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 83 mg/kg - Consumer: 83 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 0.83 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
- PNEC Exposure Limit Values
Copper - CAS: 7440-50-8
Target: Soil (agricultural) - Value: 65.5 mg/kg
Target: Fresh Water - Value: 0.0078 mg/l
Target: Freshwater sediments - Value: 87 mg/kg
Target: Marine water - Value: 0.0052 mg/l
Target: Marine water sediments - Value: 676 mg/kg
- zinc powder - zinc dust (stabilized) - CAS: 7440-66-6
Target: Fresh Water - Value: 0.0206 mg/l

Safety Data Sheet

ZEUS ORO

Target: Freshwater sediments - Value: 117.8 mg/kg
Target: Marine water - Value: 0.0061 mg/l
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:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

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:	gold
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.
Flash point:	N.A.
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	1.23 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.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Safety Data Sheet

ZEUS ORO

- 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 mixture:
N.A.

Toxicological information of the main substances found in the mixture:

zinc powder - zinc dust (stabilized) - CAS: 7440-66-6

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat 5.41 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

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

N.A.
- 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.

Safety Data Sheet

ZEUS ORO

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.
- 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: Copper
- 14.6. Special precautions for user
ADR-Tunnel Restriction Code: (E)
IATA-Passenger Aircraft: 964
IATA-Cargo Aircraft: 964
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)
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:

Safety Data Sheet ZEUS ORO

Restriction 3

Restriction 40

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

H410 Very toxic to aquatic life with long lasting effects.

H225 Highly flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H330 Fatal if inhaled.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H301 Toxic if swallowed.

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.
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.

Safety Data Sheet

ZEUS ORO

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.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.