



Safety Data Sheet dated 8/2/2018, version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Mixture identification: Trade name: METALLO FUSO OTTONE Trade code: N357920 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: 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, Acute Tox. 4, Harmful if swallowed.

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:

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor/... if you feel unwell.

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

Special Provisions:

None

Contains

Copper

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	ldent. Numb	er	Classification
>= 70% - < 80%	Copper	CAS: EC: REACH No.:	7440-50-8 231-159-6 01- 2119480154 -42-XXXX	
>= 30% - < 40%	zinc powder - zinc dust (stabilized)	Index number: CAS: EC: REACH No.:	7440-66-6 231-175-3	 ♦ 4.1/A1 Aquatic Acute 1 H400 ♦ 4.1/C1 Aquatic Chronic 1 H410

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley and dispose off safely.

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

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:

Give nothing to eat or drink.

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

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- 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
 - 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, inhaltion 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. Contamined 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:
 - 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
 - Copper CAS: 7440-50-8

- OEL Type: ACGIH - TWA(8h): 0.2 mg/m3 - Notes: Fume, as Cu. Irr, GI, metal fume fever

- OEL Type: ACGIH - TWA(8h): 1 mg/m3 - Notes: Dusts and mists, as Cu. Irr, GI, metal fume fever



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 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: 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: powder Colour: gold

Odour:	odourless	
Odour threshold:	N.A.	
pH:	N.A.	
Melting point / free	ezing point: Cu 1083 °C; Zr	ո 415 °C
Initial boiling point	and boiling range: N.A.	
Solid/gas flammat	bility: N.A.	
Upper/lower flamr	mability 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:	8.5 - 8.8 g/cm3 20°C
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 pro	operties 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
 It may generate toxic gases on contact with azo, diazo and hydrazines compounds.
 It may catch fire on contact with mineral acids, mercaptans and other organic sulphides, and powerful oxidising agents.
- 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:
 - MĚTALLO_FUSO OTTONE
 - a) acute toxicity
 - The product is classified: Acute Tox. 4 H302
 - 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
 - Not classified
 - No data available for the product
 - 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

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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:
Copper - CAS: 7440-50-8
a) acute toxicity:
Route: Oral - Species: Rat > 2000 mg/kg
Test: LC50 - Route: Inhalation Dust - Species: Rat 5.41 mg/kg - Duration: 4h
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

SECTION 12: Ecological information

12.1. Toxicity

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

METALLO_FUSO OTTONE

The product is classified: Aquatic Acute 1 - H400; Aquatic Chronic 2 - H411

- 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:	3077
IATA-Un number:	3077
IMDG-Un number:	3077
14.2. UN proper shipping name	
ADR-Shipping Name:	col15
IATA-Technical name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
	N.O.S.
IMDG-Technical name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
	N.O.S.
14.3. Transport hazard class(es)	
ADR-Class:	9
ADR-Label:	9
ADR - Hazard identification nu	mber: 90
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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-Enviromental Pollutant:	Yes
Marine pollutant:	Marine pollutant
Most important toxic componer	nt: Copper
14.6. Special precautions for user	
ADR-Tunnel Restriction Code:	(E)
IATA-Passenger Aircraft:	956
IATA-Cargo Aircraft:	956
limited quantity:	
5 kg	
IMDG-EMS: F-A ,S-F	
14.7. Transport in bulk according to A	nnex 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) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 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: No restriction. 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 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:

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.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
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
Acute Tox. 4, H302	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 2, H411	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.
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

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	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.