



Safety Data Sheet dated 01/06/2017, version 1

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

1.1 Product Identifier

Mixture identification:

Trade name: Poltiglia Caffaro 20 WG

Trade code: -

1.2 Relevant identified uses of the substance/mixture and uses advised against

Agricultural use

Other use not admitted

1.3 Details of the supplier of the safety data sheet

Company:

ISAGRO S.p.A. – Via Caldera, 21 – 20153 – Milan - Italy

Emergency telephone number of the company and/or of an authorised advisory centre:

Tel.: 02 40 901 276

Competent person responsible for the safety data sheet:

msds@isagro.com

1.4 Emergency telephone number

QSE Department (office hours: 9.00 – 18.00) - Phone n.. ++39 02 40901209

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

In compliance with EC Regulation n. 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

According to **CLP**:

Symbols:



Warning

Hazard statements:

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.

P103 Read label before use.

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation

Special Provisions:

EUH401 To avoid risks to human health and the environment, comply with the instructions for use

2.3 Other hazards

No other hazards

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

N.A.

3.2 Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

70% - 80% Bordeaux Mixture tech. grade
CAS: 8011-63-0



3.1/4/Inhal Acute Tox. 4 H332



3.3/1 Eye Dam. 1 H318



4.1/A1 Aquatic Acute 1 H400



4.1/C2 Aquatic Chronic 2 H411

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

Symptoms: denaturation of proteins with lesion at the level of the mucous membranes, renal and hepatic damage, CNS damage, emolysis. Vomit with emission of green material, gastro-oesophageal pyrosis, haematic diarrhea, abdominal colitis, haemolytic jaundice, hepatic and renal insufficiency, convulsions, collapse.

Fever caused by metal inhalation. Skin and eye irritation.

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-

Therapy:

gastric lavage with a-lactalbumin solution, in case of high cupraemia use ligand compounds, penicillamine if the oral route is viable or intravenous CaEDTA and intramuscular BAL; for the rest symptomatic treatment.

5. FIRE-FIGHTING 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 fire-fighters

Use suitable breathing apparatus. Self-contained 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.

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

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Bordeaux Mixture Tec. (powder) - CAS: 8011-63-0

TLV TWA: 1 mg/m³ (as Cu)

DNEL Exposure Limit Values

Not available

PNEC Exposure Limit Values

Not available

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

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance and colour:	Spherical microgranules, blue
Odour:	Odourless
Odour threshold:	Not relevant
pH:	6 – 7 (suspension in water)
Melting point / freezing point:	Not applicable
Initial boiling point and boiling range:	Not applicable
Solid/gas flammability:	Not flammable (based on ingredients)
Upper/lower flammability or explosive limits:	Not relevant
Vapour density:	Not applicable
Flash point:	Not relevant
Evaporation rate:	Not applicable
Vapour pressure:	Not applicable
Relative density:	1.15 g/ml (tap density)
Solubility in water:	Insoluble
Lipid solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not applicable due to salt insolubility
Auto-ignition temperature:	Not relevant
Decomposition temperature:	Not known
Viscosity:	Not applicable
Explosive properties:	Not explosive
Oxidizing properties:	Not oxidizing (based on ingredients)

9.2 Other information

Miscibility:	Not available
Fat Solubility:	Not available
Conductivity:	Not available
Substance Groups relevant properties	Not available

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.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Data referred to the *mixture*:

Acute toxicity:

LD50 (oral) (OECD 423):
> 2000 mg/kg (rat)

LD50 (dermal) (OECD 402):
> 2000 mg/kg (rat)

LC50 (4h) (inhalation):
Not required

Irritation power:

Acute skin irritation (OECD 404):
Not irritating (male New Zealand White rabbit)

Acute eye irritation (OECD 405):
Not irritating (male New Zealand White rabbit)

Skin sensitisation (OECD 406):
Not sensitizer (Guinea Pig)

Data referred to *bordeaux mixture tech. grade*:

Carcinogenic effect (OECD 451):
No carcinogenic potential (test, rat)
No evidence of carcinogenic effects (ingestion) (man)

Mutagenic effect (OECD 474):
No evidence of mutagenic effect

Teratogenicity (EPA-TSCA 793400):
No evidence of teratogenic effect (test, rat)

Reproduction toxicity (OECD 416):
No evidence of reproduction toxicity

STOT-single exposure:
Not applicable

STOT-repeated exposure:
Not applicable

Aspiration hazard:
Not applicable

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Adopt good working practices, so that the product is not released into the environment.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Data referred to the *mixture*:

Fish –

Acute/chronic toxicity (OECD 203):

Onchorynchus mykiss,

LC50 (96 h) > 100 mg/L

NOEC (96 h) = 100 mg/L

Invertebrates –

Acute/chronic toxicity (OECD 202):

Daphnia magna,

EC50 (48 h): 17.65 mg/L;

NOEC (48 h): 0.882 mg/l

Algae-

Acute/chronic toxicity (OECD 201)

Inhibition test, Desmodesmus subspicatus,

EbC50: 3.24 mg/l

ErC50: 58.3 mg/l

12.2 Persistence and degradability

Data referred to *bordeaux mixture tech. grade*:

Stable to hydrolysis and not expected to be degraded by photolysis in water.

Not readily biodegradable.

BOD: not applicable

COD: not available

12.3 Bioaccumulative potential

Data referred to *bordeaux mixture tech. grade*:

Not applicable due to salt insolubility

12.4 Mobility in soil

Data referred to *bordeaux mixture tech. grade*:

Not available. Copper is considered weakly mobile in soil

12.5 Results of PBT and vPvB assessment

Not requested. No PBT and/or vPvB substance is contained in the preparation

12.6 Other adverse effects

None

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

14.1 UN number:

ADR-UN number: 3077

IMDG-Un number: 3077

14.2 UN proper shipping name:

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bordeaux mixture)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bordeaux mixture)

14.3 Transport hazard class(es):

ADR-Class: 9

ADR-Label: 9

ADR – Hazard
identification number: 90
IMDG-Class: 9

14.4 Packing Group:
ADR-Packing Group: III
IMDG-Packing group: III

14.5 Environmental hazards
Marine pollutant: Marine pollutant

14.6 Special Precautions for User
Limited Quantity: 5 kg
IMDG-EMS: F-A, S-F
Tunnel Restriction Code: (E)

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

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:

Where applicable, refer to the following regulatory provisions :
Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):
Not requested

15.2. Chemical safety assessment
Not requested

16. OTHER INFORMATION

H statements in section 3:
H332 Harmful if inhaled.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.

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
CCNL - Appendix 1
Insert further consulted bibliography

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.

This MSDS is in compliance with Reg. EC n. 830/2015

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.
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.