



Safety Data Sheet dated 27/5/2005, version 1

## 1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

Trade name: FANTIC M WG  
Trade code: -  
Company:  
ISAGRO S.p.A.- Via Caldera, 21 – 20153 MILANO (Italy)  
Emergency telephone number of the company and/or of an authorised advisory centre:  
Phone n. ++39 02 40 901 276

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components within the meaning of EEC directive 67/548 and corresponding classification:

60% - 70% Mancozeb  
CAS: 8018-01-7 EINECS: 235-654-8  
N Xi R37 R43 R50/53

3% - 5% Benalaxyl-M  
CAS: 98243-83-5  
N R51/53

## 3. HAZARDS IDENTIFICATION

If inhaled, the product causes irritation in the airways.  
If brought into contact with the skin, the product may cause sensitisation of the skin.  
This product is a threat to the environment: very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 4. FIRST AID MEASURES

Contact with skin:  
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.

Contact with eyes:  
Wash immediately with water for at least 10 minutes.

Swallowing:  
Induce vomiting. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety-data sheet.  
A suspension of activated charcoal in water, or liquid paraffin may be administered.

Inhalation:  
Ventilate the premises. The patient is to be removed immediately from the contaminated premises to rest in a well ventilated area. OBTAIN MEDICAL ATTENTION.

## 5. FIRE-FIGHTING MEASURES

Recommended extinguishers:  
Water, CO<sub>2</sub>, Foam, Chemical powders, according to the materials involved in the fire.

Extinguishers not to be used:  
None in particular.

Risks arising from combustion:  
Avoid inhaling the fumes which at high temperatures may contain toxic substances such as CO<sub>x</sub>, NO<sub>x</sub>, SO<sub>x</sub>, HCN, CS<sub>2</sub>, and H<sub>2</sub>S.

Protective equipment:  
Use protection for the respiratory tract. Self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

Measures for personal safety:  
Use a mask, gloves and protective clothing.

Environmental measures:  
Limit leakages with earth or sand.  
If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

Cleaning methods:  
Rapidly recover the product. To do so, wear a mask and protective clothing.  
If the product is in a liquid form, stop it from entering the drainage system.  
Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material.  
After the product has been recovered, rinse the area and materials involved with water.

## 7. HANDLING AND STORAGE

Handling precautions:  
Avoid contact and inhalation of the vapours. See, too, paragraph 8 below.  
Do not eat or drink while working.

Incompatible materials:  
None in particular.

Storage conditions:  
Instructions as regards storage premises:

Adequately ventilated premises.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Precautionary measures:

Give adequate ventilation to the premises where the product is stored and/or handled.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged, e.g. CEN/FFP-2(S) or CEN/FFP-3(S).

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Eye protection:

Safety goggles.

Protection for skin:

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

Exposure limit(s) (ACGIH): -

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	Granules
Odor:	Slight
pH (1% in water):	Approx. 7
Bulk density:	Approx. 500 g/l
Autoignition temperature:	141 °C (Method EEC A16)
Solid/gas flammability:	Not "highly flammable" (Method EEC A10)
Explosive properties:	Non known
Solubility in water:	It gives suspension

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## 10. STABILITY AND REACTIVITY

Conditions to avoid:

Stable under normal conditions. Avoid high temperatures, direct sunlight and moisture.

Substances to avoid:

Avoid oxidizing agents, acids and alkalis.

Hazardous decomposition products:

None. If involved in a fire, toxic substances such as CO<sub>x</sub>, NO<sub>x</sub>, SO<sub>x</sub>, HCN, CS<sub>2</sub>, and H<sub>2</sub>S may be emitted.

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## 11. TOXICOLOGICAL INFORMATION

The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

Data referred to preparation, FANTIC M WG:

Acute toxicity:

LD50 (oral): > 5000 mg/kg (rat)

LD50 (dermal): > 5000 mg/kg (rat)

Irritating power:

Skin: not classified as eye irritant (rabbit).

Eyes: not classified as skin irritant (rabbit).

Sensitizing power:

not classified as skin sensitizer.

Data referred to Benalaxyl M:

Carcinogenic effects:

No carcinogenic effects

Mutagenic effects:

No mutagenic effects.

Teratogenic effects:

No teratogenic effect.

Data referred to Mancozeb:

Irritating power:

Respiratory system: irritating.

Carcinogenic effects:

Not classified as carcinogenic substance.

Mutagenic effects:

Not classified as mutagenic substance.

Teratogenic effects:

Not classified as teratogenic substance.

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## 12. ECOLOGICAL INFORMATION

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

Data referred to preparation, FANTIC M WP:

Fish-

Rainbow trout, LC50 (96h): 1.5 mg/l

Daphnia-

Daphnia magna, LC50 (48h): 1.8 mg/l  
Algae-  
Green Algae, EC50 (72h): 0.26 mg/l

Data referred to Benalaxyl M:

Mobility:

Slight mobility or immobility in soil.

Persistence/degradability:

Half life = 36-124 d (four soils) - Lab. study

Bioconcentration ratio:

57:1 (Bluegill sunfish) (obtained with the racemic compound instead of Benalaxyl M)

Data referred to Mancozeb:

Environmental fate: easily degradable in the environment by hydrolysis, oxidation, photolysis and metabolism. In soil the half life is approximately 6-15 days.

List of substances dangerous for the environment and corresponding classification:

60% - 70% Mancozeb

CAS: 8018-01-7 EINECS: 235-654-8

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3% - 5% Benalaxyl M

CAS: 98243-83-5

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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### 13. DISPOSAL CONSIDERATIONS

Recover if possible. In so doing, comply with the local and national regulations currently in force.

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### 14. TRANSPORT INFORMATION

ADR-UN number:	3088
ADR-Class:	4.2
ADR-Upper number:	40
ADR-Shipping Name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (benalaxyl-M and mancozeb)
ADR-Label:	4.2
ADR-Packing Group:	II
Rail (RID):	4.2
Marine pollutant:	Marine pollutant
IMDG-Un number:	3077
IMDG-Class:	4.2
IMDG-Technical name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (benalaxyl-M and mancozeb)
IMDG-Packing group:	II
IMDG-Label:	4.2 + Marine pollutant
IMDG-EMS:	F-A, S-J

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### 15. REGULATORY INFORMATION

99/45/EEC (Classification and Labelling):

Symbols:

Xi Irritant

N Dangerous for the environment

R Phrases:

R37 Irritating to respiratory system.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrases:

S2 Keep out of the reach of children.

S24 Avoid contact with skin.

S36/37 Wear suitable protective clothing, gloves

S 46 If swallowed, seek medical advice immediately and show this container or label.

S56 Dispose of this material and its container to hazardous or special waste collection point.

Contents:

Mancozeb

Where applicable, refer to the following regulatory provisions :

Directive 96/82/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.

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### 16. OTHER INFORMATION

Text of R phrases referred to under heading 2:

R37 Irritating to respiratory system.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

ACGIH - Treshold Limit Values - 1997 edition

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.

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