

SAFETY DATA SHEET
AGRIA MANCOZEB 75 WDG
SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

Product name AGRIA MANCOZEB 75 WDG

Product number MANCOZ0750WDA

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

Identified uses Fungicide

1.3. Details of the supplier of the safety data sheet

Supplier Hockley Agro
Hockley House
3 Longstone Road
Ashbrook Office Park
Manchester
M22 5LB
TEL: +44 (0) 161 209 7400
FAX: +44 (0) 161 209 7401
sds@hockley.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0)800 246 1274 (24 hours)

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Sens. 1 - H317 Repr. 2 - H361d

Environmental hazards Aquatic Acute 1 - H400

2.2. Label elements
Pictogram


Signal word

Warning

Hazard statements

H317 May cause an allergic skin reaction.
H361d Suspected of damaging the unborn child.
H400 Very toxic to aquatic life.

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Precautionary statements	<p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P261 Avoid breathing dust.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p>
Supplemental label information	<p>EUH208 Contains Mancozeb. May produce an allergic reaction.</p> <p>EUH401 To avoid risks to human health and the environment, comply with the instructions for use.</p>
Contains	<p>Mancozeb Manganese ethylenebis (dithiocarbamate) polymeric complex with zinc salt, Hexamethylene tetramine</p>
Supplementary precautionary statements	<p>P201 Obtain special instructions before use.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 Avoid release to the environment.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mancozeb Manganese ethylenebis (dithiocarbamate) polymeric complex with zinc salt 75±2% <p>CAS number: 8018-01-7 M factor (Acute) = 10</p>
Classification Skin Sens. 1 - H317 Repr. 2 - H361d Aquatic Acute 1 - H400
Hexamethylene tetramine <1% <p>CAS number: 100-97-0 EC number: 202-905-8</p>
Classification Flam. Sol. 2 - H228 Resp. Sens. 1 - H334 Skin Sens. 1 - H317
SODIUM METHYLENE POLYMETHYLNAPHTHYL SULPHONATE <1% <p>CAS number: 1322-93-6 EC number: 215-343-3</p>
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2 - H319 STOT SE 3 - H335

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

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SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove from exposure area to fresh air. Provide artificial breathing if the breathing has stopped Seek medical attention immediately.
Ingestion	Never give anything by mouth to an unconscious person. Get medical attention immediately. Do not induce vomiting. If the patient is conscious Rinse mouth thoroughly with water. Give plenty of water to drink.
Skin contact	Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if symptoms are severe or persist. Wash contaminated clothing before reuse.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes.

4.2. Most important symptoms and effects, both acute and delayed

General information	Possible manifestation of allergic symptoms such as urticaria, allergic oedema. Possible changes in catarrhal mucous membrane of eyes and upper respiratory tract.
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4.3. Indication of any immediate medical attention and special treatment needed

Specific treatments	No specific antidote available. Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use carbon dioxide or dry powder to extinguish. Larger fires: Water spray. Foam.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Sulphur dioxide. Hydrogen sulphide (H ₂ S). Oxides of nitrogen.
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5.3. Advice for firefighters

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Remove immediately.
For emergency responders	Eliminate all ignition sources (flame or spark). Provide local and general exhaust ventilation. Use protective clothing and gloves, respiratory mask with an effective particulate filter, chemical goggles for eye protection

6.2. Environmental precautions

Environmental precautions	Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Eliminate all sources of ignition. Absorb in vermiculite, dry sand or earth and place into containers. Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. Collect and place in suitable waste disposal containers and seal securely.
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6.4. Reference to other sections

Reference to other sections	Collect and dispose of spillage as indicated in Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Use process enclosures, local exhaust ventilation and other suitable engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. (See section 8). Dust may form explosive mixtures with air. All the areas where accumulation of dust in dangerously high concentrations may occur have to be indicated and provided with fire extinguishing systems/tools. Keep away from sources of ignition (open flames, sparkles).

Advice on general occupational hygiene Wear protective clothing, gloves, eye and face protection. Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Remove contaminated clothing and protective equipment before entering eating areas. Do not eat, drink or smoke when using this product. Avoid inhalation of dust. Avoid contact with skin, eyes and clothing. Keep within the workspace only the quantities necessary for the normal working process.
Containers / packaging must not be left open. Clean equipment and the work area every day.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep only in the original container in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent accumulation of dust. Keep out of reach of children. Keep away from flammable and combustible materials. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Specific end use(s) Refer to the label and/or leaflet

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective equipment



Eye/face protection Wear approved safety goggles (EN 166).

Hand protection Wear protective gloves. For work of long duration or where mechanical processes present a risk, use protective gloves made of: Nitrile rubber. protection class of 5 or higher Thickness: > 0.4 mm The selected gloves should have a breakthrough time of at least 4 hours.

Other skin and body protection Wear apron or protective clothing in case of contact.

Respiratory protection Wear a suitable dust mask. Disposable filtering half mask respirators should comply with European Standard EN149 or EN405.

Environmental exposure controls Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Solid. Powder.

Odour Characteristic.

pH pH (diluted solution): 6-7.5 (1%)

Flash point did not ignite

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Flammability (solid, gas)	The product is not flammable.
Bulk density	Pour density = 0.587 g.cm-3 Tap density = 0.634 g.cm-3
Solubility(ies)	The mixtures with water, ethanol and hexane showed separation of insoluble material in the two tested doses (maximum and minimum).
Auto-ignition temperature	161°C
Explosive properties	Not considered to be explosive.
Oxidising properties	Vigorous reaction with cellulose
9.2. Other information	
Other information	corrosion :Stainless steel = 0.0004 mm/year, Aluminium = 0.0025 mm/year, Copper = 0.0114 mm/year, Iron = 0.0638 mm/year, Brass = 0.0135 mm/year

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Under normal conditions of storage and use, no hazardous reactions will occur.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known.

10.4. Conditions to avoid

Conditions to avoid Avoid storage at temperature > 35 0C in a confined place.
Slow decomposition in presence of heat and moisture.
Prevent heating of the material to avoid thermal decomposition.

10.5. Incompatible materials

Materials to avoid Avoid contact with the following materials: Strong alkalis. Strong acids. Strong oxidising agents. Decomposes under alkaline and acidic conditions.

10.6. Hazardous decomposition products

Hazardous decomposition products (see section 5)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >5000 mg/kg bw

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg bw

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ >4.835 mg/L air (rats)

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Skin sensitisation

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Skin sensitisation May cause sensitisation by skin contact. Calculation method.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity - development Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure

STOT - single exposure Not available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not available.

Aspiration hazard

Aspiration hazard Not available.

SECTION 12: Ecological Information

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 2.46 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates EC₅₀, 24 hours: 1.09 mg/l, Daphnia magna
EC₅₀, 48 hours: 0.54 mg/l, Daphnia magna
NOEC, 48 hours: 0.1 mg/l, Daphnia magna
LOEC, : 0.3 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 0.80 mg/l, Pseudokirchneriella subcapitata (growth inhibition)
EC₅₀, 72 hours: 1.73 mg/l, Pseudokirchneriella subcapitata (growth rate inhibition)
NOEC, 72 hours: 0.01 mg/l, Pseudokirchneriella subcapitata
LOEC, : 0.02 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - microorganisms No long-term effect on carbon or nitrogen transformation in the two types of soils evaluated

Acute toxicity - terrestrial LD₅₀, : >2000 mg/kg/day, Coturnix Japonica (Japanese quail)
LD₅₀, 48 hours: >133 µg / bee, Apis Mellifera (Honeybee)
LD₅₀, 14 days: >1000 mg/kg, Eisenia Fetida (Earthworm)

12.2. Persistence and degradability

Persistence and degradability For Mancozeb water – rapidly hydrolyzed with a half-life < 2 days soils – readily degradable, DT50 soil : 6-15 days

12.3. Bioaccumulative potential

Bioaccumulative potential For Mancozeb Expected to be readily biodegradable.
log Kow: 1.33, log BCF: 0.32,

12.4. Mobility in soil

Mobility For Mancozeb Low to moderate potential of mobility in soil – Log Koc>3.3

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

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12.6. Other adverse effects

Other adverse effects Not known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Disposal methods	Recommended treatment method: Waste material and any included combustible absorbent and containers should be suitable for incineration at an approved facility. Collection of small product quantities: Store in solid waste containers. The container should be clearly labelled, with content description, danger indication symbols, H- and P- phrases. Store in well ventilated areas, until deposit to a licensed waste disposal company. The water used for contaminated surface washing should be collected for further treatment.
Waste class	07 04 13* solid waste, containing dangerous substances 07 04 01* aqueous washing liquid and mother liquors 15 01 10* packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

General	Environmentally Hazardous Substance Mark NOT required for single packagings and combination packagings containing inner packagings ≤ 5L for liquids, or ≤ 5kg for solids. (ADR special provision 375, IMDG code 2.10.2.7, IATA special provision A197) Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provisions of the Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class all provisions of this Code relevant to any additional hazards continue to apply.
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14.1. UN number

UN No. (ADR/RID)	3077
UN No. (IMDG)	3077
UN No. (ICAO)	3077
UN No. (ADN)	3077

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M7
ADR/RID label	9
IMDG class	9
ICAO class/division	9

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ADN class 9

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ADN packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-A, S-F

ADR transport category 3

Emergency Action Code 2Z

Hazard Identification Number (ADR/RID) 90

Tunnel restriction code (-)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
EC Regulation 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products (as amended)

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Key literature references and sources for data Source: European Chemicals Agency, <http://echa.europa.eu/>

Classification procedures according to Regulation (EC) 1272/2008 Repr. 2 - H361d: Calculation method. Skin Sens. 1 - H317: On basis of test data. Aquatic Acute 1 - H400: On basis of test data.

Training advice General occupational hygiene training recommended

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SDS number	20787
Hazard statements in full	H228 Flammable solid. H302 Harmful if swallowed. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H361d Suspected of damaging the unborn child. H400 Very toxic to aquatic life.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.