

Safety Data Sheet (SDS) MAR 800WG/01

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According to SANS 10234:2019/UN GHS 9th Ed
Revision Date: 2023/10/31

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Version: 2.0

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

Product identifier:

Identification as on the label/Trade name: **MARVEL 800WG**

Additional information: Product code MAR 800WG/01

Relevant identification uses of the substance and uses advised against:

Identified uses: Fungicide.

Uses advised against: Use only as directed.

Formulator:

Shandong Weifang Rainbow Chemical Co., Ltd.
Binhai Economic Development Area, Weifang,
Shandong 262737
China

Details of the distributor:

AECI Limited
14 Field Road, LILANTON

Emergency telephone numbers:

Griffon Poison information centre: 082 446 8946
Poisons Information Helpline: 0861 555 777
AECI Limited: (011) 823 8000 (o/h) Spill Tech: 086 100 0366 (a/h)

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to:

SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]	
Hazard classes/Hazard categories	Hazard statement
Acute toxicity oral (Category 5)	H303
Acute toxicity dermal (Category 5)	H313
Skin irritation (Category 3)	H316
Skin sensitivity (Category 1)	H317
Serious eye damage (Category 1)	H318
Acute toxicity inhalation (Category 3)	H331
STOT RE 2	H373
Carcinogenicity (Category 1A)	H350
Hazardous to the environment (Acute category 1)	H400
Hazardous to the environment (Chronic category 1)	H411

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For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: None.

The most important adverse human health effects: Toxic if inhaled, causes serious eye damage and may cause skin allergies.

Label elements

Hazard pictograms:



Signal Word: DANGER

Hazard Statements: H303 May be harmful if swallowed. H313 May be harmful in contact with skin. H331 Toxic if inhaled. H316 Causes mild skin irritation. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. H305: May cause cancer. H373 May cause damage to organs. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements: P203 Obtain, read and follow all safety instructions before use. P260 Do not breathe dust/fume/gas/mist/ vapours/spray. P261 Avoid breathing dust/fume/gas/mist/ vapours/spray. P264+P265 Wash hands thoroughly after handling. Do not touch eyes. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P301+ P317 IF SWALLOWED Get medical help. P302 + P317 IF ON SKIN Get medical help. P302 + P352 IF ON SKIN Wash with plenty of water. P304 + P340 IF INHALED Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338 IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P316 Get emergency medical help immediately. P317 Get medical help. P318 IF exposed or concerned, get medical advice. P319 Get medical help if you feel unwell. P321 Specific treatment. P332 + P317 If skin irritation occurs Get medical help. P337 + P317 If eye irritation persists Get medical help. P362 + P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Special labelling of certain mixtures: None.

Other hazards: None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC/EC)	CAS –No.	Concentration % by weight
	EC-No.	

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Captan	133-06-2	80%
	205-087-0	
Others to 100%		

For full text of H statements see section 16

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation: If inhaled, immediately transfer patient to nearest hospital or medical centre, warning by telephone of the estimated arrival time so that the start of treatment is not delayed. Get medical attention immediately.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation persists.

In case of eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

In case of ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention.

Most important symptoms and effects, both acute and delayed:

Inhalation: Toxic if inhaled.

Ingestions: May be harmful if swallowed.

Skin contact: May cause an allergic skin reaction.

Eye contact: Causes serious eye damage.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5. FIRE -FIGHTING MEASURE

Extinguisher media:

Suitable extinguisher media: Carbon dioxide, foam dry chemical and water fog.

SMALL FIRE: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam.

LARGE FIRE: Water spray can be used for larger fires or cooling of unaffected stock but avoid the accumulation of polluted run-off from the site.

Unsuitable extinguishing media: Do not use high volume water jet, due to contamination risk.

Special hazards arising from the mixture:

This product, if scattered, may form flammable or explosive dust clouds in air. Carbon oxides, nitrogen oxides (NOx), sulphur oxides and hydrogen chloride gas

Advice for fire-fighters:

Avoid inhaling hazardous vapours, fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Be sure to use an approved/certified respirator or equivalent.

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SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Prevent dust formation. Avoid contact with skin, eyes, clothing. Isolate area. Keep unnecessary and unprotected personnel from entering the area.

For emergency responders: Isolate the spill area and limit the access to emergency responders only. Avoid any contact with spilled material, use adequate protective clothes and gloves.

Environmental precautions:

Prevent entry into sewers, basements or confined areas.

Methods for containment and cleaning up:

For small spills Contain spilled material, if possible, sweep or vacuum prevent dust formation. Collect in suitable and properly labelled containers. Absorb washings with materials such as: sand, earth, vermiculite or diatomaceous earth.

For large spills Prevent entry into sewers, water courses, basements or confined areas. Shovel or vacuum spilled material, prevent dust formation. Contain washings and collect spillage with non-combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in well labelled container for disposal according to local regulations.

Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information:

None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Keep locked up. Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place. Keep container dry. Air and moisture sensitive.

Specific end uses:

Use as directed. Use original container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

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Occupational exposure limits (OEL):

Captan (CAS 133-06-2) OEL-RL 10 mg/m³, DESEN- dermal sensitisation, potential to produce dermal sensitisation.
SKIN-danger of cutaneous absorption.

Biological exposure indices (BEI): None.

Additional exposure limits under the conditions of use: None.

Exposure control: Only used in a well- ventilated area.

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. A Risk Assessment should be conducted before handling is to commence to determine specific exposure control.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Wear chemical goggles when using this product.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

Body protection: If you believe you may have a sensitization to this product or any of its declared ingredients, you should prevent skin contact by appropriate wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered.

Respiratory protection: If respiratory protection is required; use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: Prevent product from entry into sewers and water courses.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Solid granules.

Colour: White.

Odour: Faint characteristic odour.

Odour threshold: No information available.

pH: No information available.

Melting point/range (°C): 178°C.

Boiling point/range (°C): Not applicable.

Flash point (°C): No information available.

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Evaporation rate: No information available.

Flammability (solid, gas): No information available

Ignition temperature (°C): No information available.

Upper/lower flammability/explosive limits: No information available.

Vapour pressure (25°C): Essentially non-volatile.

Vapour density: No information available.

Density: 280-360.4 kg/m³.

Water solubility (g/l) at 25°C: 3.3 mg/ℓ.

n-Octanol/Water partition coefficient: No information available.

Auto-ignition temperature: No information available.

Decomposition temperature: No information available.

Kinematic viscosity: No information available.

Physical hazards:

Explosive properties: This product, if scattered, may form flammable or explosive dust clouds in air.

Other information:

Fat solubility (solvent-oil to be specified): No information available.

Dissociation constant in water (p Ka): No information available.

Oxidation-reduction potential: No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

The product is stable under normal conditions.

Chemical stability:

Stable under normal storage conditions for 2 years.

Possibility of hazardous reactions:

Hazardous polymerisation does not occur.

Conditions to avoid:

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Protect from (sun)light, open flame sources of heat and humidity.

Incompatible materials:

Alkali materials, such as lime and Bordeaux mixture will reduce fungicidal activity.

Hazardous decomposition products:

When heated to decomposition it emits toxic fumes of hydrogen chloride, sulphur oxides and nitrogen oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No Information available.

Excretion:

Captan

In mammals, the three chlorine atoms are cleaved under the influence of cellular sulfhydryl compounds.

Trithiocarbamate, thiophosgene and tetrahydrophthalimide are formed.

Information on toxicological effects: (ref. pesticide manual 16th ed)

Acute toxicity:

Captan

Acute oral LD₅₀ for rats 9000 mg/kg.

Dermal LD₅₀ for rats >4500 mg/kg.

Inhalation LC₅₀ (4 h) for rats 0.668 mg/ℓ.

Chronic toxicity: No information available.

Skin corrosion/irritation:

Captan

Mild skin irritant for rabbits.

Eye corrosion/irritation:

Captan

Corrosive to eyes for rabbits.

Respiratory or skin sensitization:

No information available.

Germ cell mutagenicity:

No information available.

Carcinogenicity:

No information available.

Reproductive toxicity:

No information available.

STOT-single exposure:

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No information available.

STOT-repeated exposure:

No information available.

Aspiration hazard:

No information available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity: (ref. pesticide manual 16th ed)

Captan

Birds: Acute oral LD₅₀ for mallard ducks and pheasants >5000 mg/kg, bobwhite quail 2000-4000 mg/kg. Not toxic for starlings or red-winged blackbirds at 100mg/kg.

Fish: LC₅₀ (96 h) for bluegill sunfish 0.072 mg/ℓ, harlequin fish 0.3 mg/ℓ, brook trout 0.034 mg/ℓ.

Daphnia: LC₅₀ (48 h) 7-10 mg/ℓ.

Other aquatic spp. Moderately toxic to aquatic invertebrates.

Bees: LD₅₀ oral 91 µg/bee, contact 788 µg/bee.

Persistence and degradability:

The product is readily biodegradable.

Bioaccumulative potential:

Captan does not bioaccumulate in aquatic organisms.

Mobility in soil

Captan does not leach to ground water.

Results of PBT& vPvB assessment:

No information available.

Other adverse effects:

No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Consider suitable waste recycling, re-use or recovery options. Dispose of in accordance with municipal, provincial and national regulations. Waste Classification and Management Regulations (GN 634 of 2013). Dispose and or manage in accordance with the requirements contained in R634 Waste Classification & Management Regulations, R635 National Norms & Standards for the Assessment of Waste for Landfill Disposal and R636 National Norms & Standards for Disposal of Waste to Landfill.

Product/ packaging disposal:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

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SECTION 14. TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	2811	2811	2811
UN Proper shipping name:	TOXIC SOLID, ORGANIC, N.O.S (Captan)	TOXIC SOLID, ORGANIC, N.O.S (Captan)	TOXIC SOLID, ORGANIC, N.O.S (Captan)
Transport hazard class:	6.1	6.1	6.1
Packaging group:	III	III	III
Marine pollutant:	Yes	Yes	Yes
Special precautions for user:	No information	No information	No information
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	No information	No information	No information

Inland waterways: Not required.

Emergency response information: Not known.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 9, 2021.

ACGIH: American Conference of Governmental Industrial Hygienists (ACGIH)

Relevant information regarding restrictions: None.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP] and EU directives 67/548/EEC or EC 1999/45/EC

Other National regulations: National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.
National Environmental Management: Waste Act 59 of 2008.

Chemical Safety Assessment carried out?

No.

SECTION 16. OTHER INFORMATION

Indication of changes:

All sections.

Relevant classification and H statements (number and full text):

Aquatic acute 1- Hazardous to the aquatic environment (acute category 1)

Aquatic chronic 1- Hazardous to the aquatic environment (chronic category 1)

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STOT RE 2 Specific Target Organ Toxicity repeated exposure (Category 2)

H303 May be harmful if swallowed. H313 May be harmful in contact with skin. H331 Toxic if inhaled. H316 Causes mild skin irritation. H318 Causes serious eye damage. H317 May cause an allergic skin reaction

H305: May cause cancer. H373 May cause damage to organs. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.