# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** **AGFLOW RANGE**

**Synonyms** AGFLOW ● AGFLOW COPPER ● AGFLOW COPPER ZINC ● AGFLOW COPPER ZINC MOLY ● AGFLOW EXTRA ● AGFLOW SPECIAL AND AGFLOW TRACE ● AGFLOW ZINC

### 1.2 Uses and uses advised against

**Uses** FERTILISER

### 1.3 Details of the supplier of the product

**Supplier name** **CSBP LIMITED**

**Address** Kwinana Beach Road, Kwinana, WA, 6167, AUSTRALIA

**Telephone** (08) 9411 8777

**Fax** (08) 9411 8425

**Website** http://www.csbp.com.au

### 1.4 Emergency telephone numbers

**Emergency** 1800 09 3333 (Australia); +61 8 9411 8444

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

### 2.2 GHS Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

### 2.3 Other hazards

No information provided.

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

### 3.1 Substances / Mixtures

| Ingredient | CAS Number | EC Number | Content |
|---|---|---|---|
| MONOAMMONIUM PHOSPHATE | 7722-76-1 | 231-764-5 | 70 to 90% |
| AMMONIUM SULPHATE | 7783-20-2 | 231-984-1 | <30% |
| COPPER (II) OXIDE | 1317-38-0 | 215-269-1 | <1% |
| MOLYBDENUM TRIOXIDE | 1313-27-5 | 215-204-7 | <1% |
| ZINC OXIDE | 1314-13-2 | 215-222-5 | <1% |
| COATING AGENT | - | - | <1% |

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**Eye** If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

| | |
|---|---|
| **Inhalation** | If inhaled, remove from contaminated area. Apply artificial respiration if not breathing. |
| **Skin** | If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor. |
| **Ingestion** | For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). |
| **First aid facilities** | None allocated. |

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

See Section 11 for more detailed information on health effects and symptoms.

### 4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

### 5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases (phosphorus/ sulphur oxides) when heated to decomposition. May evolve ammonia and nitrogen oxides when heated to decomposition.

### 5.3 Advice for firefighters

No fire or explosion hazard exists. Toxic gases may be evolved in a fire situation.

### 5.4 Hazchem code

None allocated.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Ventilate area where possible.

### 6.2 Environmental precautions

Prevent product from entering drains and waterways.

### 6.3 Methods of cleaning up

Contain spillage, then collect and place in suitable containers for disposal. Avoid generating dust.

### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from moisture, incompatible substances and foodstuffs. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use. Do not allow to come in contact with water, either from rain, condensation or the surface on which stored. Bagged fertilisers should be stored under cover and out of direct sunlight (which degrades woven polypropylene packs). If stored in the open, do so for short periods only, and cover with a tarpaulin. If stacking is necessary, bulk bags should be stored in a stable manner, preferably in a pyramidal style. Bulk bags should not be stacked more than two high for bags containing 1 000 kg or more, or more than four high for bags containing up to 500 kg. The Pallet Capacity Rating (design weight) should not be exceeded on the bottom tier for other packs. High stacking should be avoided as pressure promotes caking. Store away from farm chemicals, e.g. insecticides, fungicides and herbicides.

### 7.3 Specific end uses

No information provided.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

**Exposure standards**

| Ingredient | Reference | TWA | | STEL | |
|---|---|---|---|---|---|
| | | ppm | mg/m³ | ppm | mg/m³ |
| Copper (fume) | SWA [AUS] | -- | 0.2 | -- | -- |
| Copper (fume, dusts & mists) | SWA [Proposed] | -- | 0.01 | -- | -- |
| Copper, dusts & mists (as Cu) | SWA [AUS] | -- | 1 | -- | -- |
| Molybdenum, insoluble compounds (as Mo) | SWA [AUS] | -- | 10 | -- | -- |
| Molybdenum, soluble compounds (as Mo) | SWA [AUS] | -- | 5 | -- | -- |
| Zinc oxide (dust) | SWA [AUS] | -- | 10 | -- | -- |
| Zinc oxide (fume & dust) | SWA [Proposed] | -- | 2 | -- | 10 |
| Zinc oxide (fume) | SWA [AUS] | -- | 5 | -- | 10 |

**Biological limits**

No biological limit values have been entered for this product.

### 8.2 Exposure controls

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Use appropriate safe working procedures to reduce the potential for an inhalation hazard.

**PPE**

**Eye / Face** Wear safety glasses.

**Hands** Wear PVC or neoprene gloves.

**Body** When using large quantities or where heavy contamination is likely, wear coveralls.

**Respiratory** Where an inhalation risk exists, wear a Class P1 (Particulate) respirator.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Appearance** | LIGHT BROWN GRANULES |
| **Odour** | ODOURLESS |
| **Flammability** | NON FLAMMABLE |
| **Flash point** | NOT RELEVANT |
| **Boiling point** | NOT AVAILABLE |
| **Melting point** | NOT RELEVANT |
| **Evaporation rate** | NOT AVAILABLE |
| **pH** | 4 to 6 (10% Solution) |
| **Vapour density** | NOT AVAILABLE |
| **Relative density** | 1.0 |
| **Solubility (water)** | SOLUBLE |
| **Vapour pressure** | NOT AVAILABLE |
| **Upper explosion limit** | NOT RELEVANT |
| **Lower explosion limit** | NOT RELEVANT |
| **Partition coefficient** | NOT AVAILABLE |
| **Autoignition temperature** | NOT AVAILABLE |
| **Decomposition temperature** | NOT AVAILABLE |
| **Viscosity** | NOT AVAILABLE |
| **Explosive properties** | NOT AVAILABLE |
| **Oxidising properties** | NOT AVAILABLE |
| **Odour threshold** | NOT AVAILABLE |

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity
Carefully review all information provided in sections 10.2 to 10.6.

### 10.2 Chemical stability
Stable under recommended conditions of storage.

### 10.3 Possibility of hazardous reactions
Polymerization is not expected to occur.

### 10.4 Conditions to avoid
Avoid heat, sparks, open flames and other ignition sources.

### 10.5 Incompatible materials
Incompatible with oxidising agents (e.g. hypochlorites) and acids (e.g. nitric acid).

### 10.6 Hazardous decomposition products
May evolve toxic gases (phosphorus/ sulphur oxides) when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity** This product is expected to be of low toxicity. Based on available data, the classification criteria are not met.

**Information available for the ingredients:**

| Ingredient | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| MONOAMMONIUM PHOSPHATE | 5,750 mg/kg (rat) | > 7,940 mg/kg (rabbit) | -- |
| AMMONIUM SULPHATE | 4,250 mg/kg (rat) | > 2000 mg/kg (rat) | -- |
| COPPER (II) OXIDE | > 2500 mg/kg (rat) | > 2000 mg/kg (rat) | -- |
| MOLYBDENUM TRIOXIDE | 2689 mg/kg (rat) | > 2000 mg/kg (rat) | > 5.84 mg/L (rat) |
| ZINC OXIDE | 7950 mg/kg (mouse) | -- | 2500 mg/m³ (mouse) |

**Skin** Not classified as a skin irritant. Prolonged or repeated contact may result in mild irritation.

**Eye** Not classified as an eye irritant. Contact may result in mild irritation, lacrimation and redness.

**Sensitisation** Not classified as causing skin or respiratory sensitisation.

**Mutagenicity** Not classified as a mutagen.

**Carcinogenicity** Not classified as a carcinogen.

**Reproductive** Not classified as a reproductive toxin.

**STOT - single exposure** Not classified as causing organ damage from single exposure. However, over exposure may result in irritation of the nose and throat, with coughing.

**STOT - repeated exposure** Not classified as causing organ damage from repeated exposure.

**Aspiration** Not classified as causing aspiration.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity
No information provided.

### 12.2 Persistence and degradability
No information provided.

### 12.3 Bioaccumulative potential
No information provided.

### 12.4 Mobility in soil

No information provided.

### 12.5 Other adverse effects

No information provided.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Waste disposal** Collect without generating dust. Place in clean, sealed containers and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).

**Legislation** Dispose of in accordance with relevant local legislation.

## 14. TRANSPORT INFORMATION

**NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA**

| | LAND TRANSPORT (ADG) | SEA TRANSPORT (IMDG / IMO) | AIR TRANSPORT (IATA / ICAO) |
|---|---|---|---|
| **14.1 UN Number** | None allocated. | None allocated. | None allocated. |
| **14.2 Proper Shipping Name** | None allocated. | None allocated. | None allocated. |
| **14.3 Transport hazard class** | None allocated. | None allocated. | None allocated. |
| **14.4 Packing Group** | None allocated. | None allocated. | None allocated. |

### 14.5 Environmental hazards

No information provided.

### 14.6 Special precautions for user

**Hazchem code** None allocated.

## 15. REGULATORY INFORMATION

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

**Poison schedule** A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Classifications** Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

**Inventory listings** **AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)**
All components are listed on AIIC, or are exempt.

## 16. OTHER INFORMATION

**Additional information** PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**Abbreviations**

| | |
|---|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| CAS # | Chemical Abstract Service number - used to uniquely identify chemical compounds |
| CNS | Central Nervous System |
| EC No. | EC No - European Community Number |
| EMS | Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods) |
| GHS | Globally Harmonized System |
| GTEPG | Group Text Emergency Procedure Guide |
| IARC | International Agency for Research on Cancer |
| LC50 | Lethal Concentration, 50% / Median Lethal Concentration |
| LD50 | Lethal Dose, 50% / Median Lethal Dose |
| $mg/m^3$ | Milligrams per Cubic Metre |
| OEL | Occupational Exposure Limit |
| pH | relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). |
| ppm | Parts Per Million |
| STEL | Short-Term Exposure Limit |
| STOT-RE | Specific target organ toxicity (repeated exposure) |
| STOT-SE | Specific target organ toxicity (single exposure) |
| SUSMP | Standard for the Uniform Scheduling of Medicines and Poisons |
| SWA | Safe Work Australia |
| TLV | Threshold Limit Value |
| TWA | Time Weighted Average |

**Report status**

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

**Prepared by**

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmtglobal.com

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