

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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| Product name: | Methograin® IGR 300 Grain Protectant |
| Other means of identification: | S-Methoprene 300 g/L Liquid |
| Recommended use of the chemical and restrictions on use: | For mixing with uninfested cereal grain for protection against immature stages of Lesser Grain Borer, Rust-Red Flour Beetle and Sawtoothed Grain Beetle, including organophosphate-resistant strains. |
| Supplier: | Barmac, a Division of Amgrow Pty Ltd |
| Street address: | 3/29 Birnie Ave, Lidcombe NSW 2141 Australia |
| Telephone no.: | +61 (0)2 9395 1200 (office hours) |
| Fax: | +61 (0)2 4729 3037 |
| Website: | www.amgrow.com.au |
| S-methoprene manufacturer: | Bábolna Bioenvironmental Centre Ltd H-1107 Budapest, Szállás u.6, Hungary |
| Emergency telephone: | Poisons Information Centre 13 11 26 (24 hours) |

2. HAZARDS IDENTIFICATION

Classification of the substance mixture: Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition).

This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

Classification of the substance or mixture:

Acute oral toxicity – Category 4

Skin corrosion/irritation – Category 2

Eye damage/irritation – Category 2

Specific target organ toxicity (STOT) (single exposure) – Category 3

Aspiration hazard – Category 1

SIGNAL WORD: WARNING



Hazard Statement(s):

H302 – Harmful if swallowed.

H304 – May be fatal if swallowed and enters airways.

H315 – Causes skin irritation.

H319 – Causes serious eye irritation.

H335 – May cause respiratory irritation.

Precautionary Statement(s):

Prevention:

P261 Avoid breathing vapours or spray.

P264 Wash contacted areas thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

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P280 Wear protective gloves or protective clothing and eye or face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P331 DO NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:

P501 - Dispose of contents/container as per container label, in accordance with local/state/territory government regulations.

The following health hazard categories fall outside the scope of the Workplace Health and Safety Regulations :

Acute Aquatic Toxicity - Category 2

Hazard Statement(s):

H401 – Toxic to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS Number | Proportion (w/w) |
|--|------------|------------------|
| S-Methoprene | 65733-16-6 | 30 % |
| Liquid Hydrocarbons | 64742-47-8 | 30 - < 60 % |
| Other components are not considered hazardous in this formulation and therefore are not required to be disclosed according to the WHS Regulations. | | |

4. FIRST AID MEASURES

Speed in treatment is essential. If poisoning occurs, contact a Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766 or a doctor. Have this SDS or the label with you.

Inhalation: If inhaled, bring affected person to fresh air. If symptoms develop, contact a Poisons Information Centre or a doctor at once.

Skin contact: Remove contaminated clothing and wash with plenty of water and soap. If symptoms develop, seek medical attention.

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

Ingestion: If swallowed, wash mouth with water and contact a Poisons Information Centre, or call a doctor. Do not induce vomiting unless told to do so by the Poisons Information Centre or doctor.

First aid facilities: Eyewash and normal washroom facilities.

Indication of immediate medical attention and special treatment needed: Treat symptomatically.

5. FIRE FIGHTING MEASURES

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| Suitable extinguishing media: | Carbon dioxide, dry chemical, foam, water fog |
| Hazchem code: | None |
| Specific hazards arising from the substance or mixture: | This product is classified as a C1 combustible product. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures. |
| Special protective equipment and precautions for fire-fighters: | In case of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and chemical-protective clothing. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately. Do not allow contaminated water to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. |

6. ACCIDENTAL RELEASE MEASURES

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| Emergency procedures/ Environmental precautions: | In the event of a spill, prevent spillage from entering drains or water courses with absorbent material and call emergency services. |
| Personal precautions/ Protective equipment: | It is good practice to wear impermeable gloves when handling chemical products. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. |
| Methods and materials for containment and cleaning up: | Contain - prevent run off into drains and waterways. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. |

7. HANDLING AND STORAGE

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| Precautions for safe handling: | Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Keep containers closed at all times - check regularly for leaks or spills. Transport and store upright. Refer to Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under 'Storage' should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of the product with incompatible materials listed in Section 10. |
| Conditions for safe storage, including any incompatibilities: | Store packages of this product in a cool, well ventilated place. Make sure that containers of this product are kept tightly closed. Keep containers dry and away from water. Make sure that the product does not come into contact with substances listed under 'Incompatibilities' in Section 10. Check packaging - there may be further storage instructions on the label. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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| Control parameters: | No value assigned for this specific material by Safe Work Australia. No biological limit allocated for the product or any of its ingredients. No biological monitoring is required. |
| Appropriate engineering controls: | Use in well ventilated areas. Keep containers closed when not in use. |
| Individual protection measures, such as Personal Protective Equipment (PPE): | |

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See container label safety directions. The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Observe good standards of hygiene and cleanliness. Always wash hands, arms and face thoroughly with soap and water before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment with detergent and warm water before storage or re-use.

Respiratory protection: Respiratory protective equipment is not needed under normal and intended conditions of product use. However if protection is required, consult AS/NZS 1715 and AS/NZS 1716 for further information.

Eye and face protection: Avoid contact with eyes. Wear a face shield when opening the container, preparing and using the prepared spray. When using in enclosed areas, wear goggles and half face piece respirator combined with dust and gas cartridge. Consult AS/NZS 1336 and AS/NZS 1337 for further information.

Skin protection: Elbow-length rubber or chemical resistant gloves must be worn when opening the container and using the product. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161 for further information.

Trousers, long sleeved shirt /cotton overalls buttoned to the neck and wrist, and closed in shoes or safety footwear should also be worn as a general precaution. Consult AS/NZS 2210 and AS/NZS 2919 for further information.

9. PHYSICAL AND CHEMICAL PROPERTIES

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| Physical state: | Liquid. |
| Colour: | Clear, straw-coloured. |
| Odour: | Hydrocarbon/solvent odour. |
| pH: | No information available. |
| Specific gravity: | No information available. |
| Melting point/Freezing point: | No information available. Liquid at normal temperatures. |
| Boiling point/range: | No information available. |
| Flash point: | No information available. |
| Evaporation point: | No information available. |
| Vapour pressure: | No information available. |
| Vapour density: | No information available. |
| Solubility: | Emulsifiable in water. |
| Partition coefficient: n- octanol/water | No information available. |
| Auto-ignition temperature: | Not relevant. |
| Decomposition temperature: | No information available |
| Viscosity: | No information available. |

10. STABILITY AND REACTIVITY

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| Reactivity: | No known reactivity hazards associated with this product, under normal conditions of use. |
| Chemical stability: | Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. |
| Possibility of hazardous reactions: | No information available. |
| Conditions to avoid: | Do not store in direct sunlight. |
| Incompatible materials: | No particular incompatibilities. Store and use as directed. |
| Hazardous decomposition products: | Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. |

11. TOXICOLOGICAL INFORMATION

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| Acute toxicity: | Harmful if swallowed, according to available information. |
| | Toxicity data for the active constituent, s-methoprene. Acute oral toxicity, Rat LD ₅₀ = >5000 mg/kg Acute dermal toxicity, Rabbit LD ₅₀ = >2000 mg/kg Acute inhalation toxicity, Rat LC ₅₀ > 210 mg/L |
| Skin irritation: | Is considered a skin irritant according to available information. |
| Eye irritation: | Serious eye irritant according to available information. |
| Respiratory or skin sensitisation: | Not a skin sensitiser and not expected to be a respiratory sensitiser according to available information. |
| Germ cell mutagenicity: | Not suspected to cause genetic defects according to available data. |
| Carcinogenicity: | Not considered to be carcinogenic according to available data. |
| Reproductive toxicity: | Not considered to be toxic to reproduction according to available data. |
| STOT-single exposure: | May cause respiratory irritation. |
| STOT-repeated exposure: | Does not cause damage to organs through prolonged or repeated exposure according to available data. |
| Aspiration hazard: | Not expected to be an aspiration hazard according to available data. |
| Chronic health effects: | Not expected to cause chronic health effects according to available data. |

12. ECOLOGICAL INFORMATION

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| Ecotoxicity: | Available information on this product indicates that this product is classified as an acute aquatic toxicant. |
| | Toxicity data for the active constituent, s-methoprene. The information below is taken from the US EPA R. Birds LD ₅₀ = 2000 mg/kg (acute) Fish (trout) LD50 = 4.4mg/L (96 h) Aquatic invertebrate (freshwater shrimp) LC ₅₀ = >100 mg/L |
| Persistence/Degradability: | It is considered that s-methoprene is not readily biodegradable. Details of s-methoprene is available at: https://echa.europa.eu/documents/10162/54df99ee-f938-4037-8f94-e325674786b2 |
| Bioaccumulative potential: | It is considered that s-methoprene has the potential to bioaccumulate. Details of s-methoprene is available at: https://echa.europa.eu/documents/10162/54df99ee-f938-4037-8f94-e325674786b2 |
| Mobility in soil: | It is considered that s-methoprene is expected to have no mobility when released to soil. Details of s-methoprene is available at: https://pubchem.ncbi.nlm.nih.gov/compound/Methoprene#section=Ecotoxicity-Values |

13. DISPOSAL CONSIDERATIONS

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| Disposal methods: | Refer to Waste Management Authority. Dispose of contents/container in accordance with local/regional/national/international regulations. Break, crush or puncture and dispose of empty containers in a local authority landfill. Triple rinse and bury rinsate and empty capsules in a local authority landfill. If no landfill is available, bury the containers below 0.5m in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product must not be burnt. Do NOT re-use containers for any other purpose. |
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14. TRANSPORT INFORMATION

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| Road and rail transport: | Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS |
| Marine transport: | Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS |
| Air transport: | Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS |

15. REGULATORY INFORMATION

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| Poison schedule (SUSMP): | 5 |
| APVMA approval no.: | 61969 |
| AICS: | All the constituents of this material are either listed on the Australian Inventory of Chemical Substances (AICS), not required due to the nature of the chemical, or have been assessed under the National Industrial Chemicals (Notification and Assessment) Act 1989 as amended. |

16. OTHER INFORMATION

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| General information: | None. |
| Issue number: | 002 |
| Issue date: | 23 February 2017 |
| | In any event, the review and, if necessary, the re-issue of an SDS shall be no longer than 5 years after the last date of issue. |
| Reason(s) for issue: | Second issue. Revised Primary SDS and updated to GHS requirements. |
| Literary reference: | ADG Code - Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition) AICS - Australian Inventory of Chemical Substances APVMA – Agricultural Pesticides and Veterinary Medicines Australia GHS - Globally Harmonised System of Classification and Labelling of Chemicals (3 rd revised edition) 2009 IARC - International Agency for Research on Cancer Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (December 2011) STEL - Short term exposure limit means the average airborne concentration of a substance calculated over a 15 minute period. The STEL should not be exceeded at any time during a normal eight hour working day. SUSMP - Standard for the Uniform Scheduling of Medicines & Poisons SWA - Safe Work Australia, formerly ASCC and NOHSC TGA – Therapeutic Goods Australia TWA - Time-weighted average means the average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week. WHS – Workplace Health and Safety |

The physical values and properties described in this SDS are typical values based on scientific literature and material produced to date, and are believed to be reliable. The manufacturer, Bábolna Bioenvironmental Centre Ltd provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. The information is supplied upon the condition that the persons receiving information will make their own determination as to the suitability for their purposes prior to use of this product. Due care should be taken to ensure that the use of this product and its disposal is in compliance with all relevant Federal, State and Local Government regulations.

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End of SDS