Date of Issue: 23 February 2017

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name:	Methograin [®] IGR Grain Protectant
Other means of identification	S-methoprene 30 g/L Emulsifiable Concentrate
Recommended use of the chemical and	For mixing with uninfested cereal grain for protection against immature
restrictions on use:	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	Bábolna Bioenvironmental Centre Ltd
manufacturer:	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:

Skin corrosion/irritation – Category 2 Serious eye damage/irritation – Category 2 Specific target organ toxicity (single exposure) – Category 3 Aspiration hazard – Category 1

SIGNAL WORD: WARNING



Hazard Statement(s):

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

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

Response:

Safety Data Sheet: Methograin® IGR Grain Protectant

Date of Issue: 23 February 2017

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.
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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion (w/w)
S-methoprene	65733-16-6 <mark>[EW1]</mark>	3% (30 g/L)
Liquid hydrocarbons	64742-47-8	> 60%
Other components are not considered hazardous in this formulation and therefore are not required to be		

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:	May cause respiratory irritation. 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 footwear and clothing, and wash with plenty of water and soap for 10-20 minutes or until chemical is removed. Take care to thoroughly cleanse area including fingernails and scalp (if applicable). Remove from contaminated area. If symptoms develop, seek medical attention.
Eye contact:	Flush eyes immediately with copious amount of water or normal saline solution for 10- 20 minutes, or until the product is removed, or until a few minutes after irritation has ceased. If symptoms develop, seek medical attention.
Ingestion:	If swallowed, wash mouth with water and contact a Poisons Information Centre, or call a doctor. Do not induce vomiting unless told to 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

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 a slight risk of an
explosion from this product if commercial quantities are involved in a fire. Fire
decomposition products from this product may be harmful if inhaled. Take
appropriate protective measures.

Date of Issue: 23 February 2017

Special protective equipment and precautions for firefighters: 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

Emergency procedures/	In the event of a spill, prevent spillage from entering drains or water courses
Environmental precautions:	with absorbent material and call emergency services.
Personal precautions/	Wear protective clothing. It is good practice to wear impermeable gloves when
Protective equipment:	handling chemical products.
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.

7. HANDLING AND STORAGE

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 product with incompatible materials listed in Section 10.
Conditions for safe storage,	Store packages of this product in a cool place. Make sure that containers of this
including any	product are kept tightly closed. Keep containers dry and away from water. Make
incompatibilities:	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

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	Use in well ventilated areas. Keep containers closed when not in use.	
controls:		
Individual protection measures	s, such as Personal Protective Equipment (PPE):	
See container label safety dire	ctions. The selection of PPE is dependent on a detailed risk assessment. The risk	
assessment should consider th environmental factors.	e work situation, the physical form of the chemical, the handling methods, and	
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:	Eye and face protection is not needed under normal and intended conditions of product use. However if protection is required, consult AS/NZS 1336 and AS/NZS 1337 for further information.	
Skin protection:	Full protective clothing, and 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.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Colour: Clear, straw-coloured.
Odour: Mild hydrocarbon odour.
pH: No information available.
Specific gravity: Approximately 0.91 at 20°C.
Melting point/Freezing point: No information available. Liquid at normal temperatures.
Boiling point/range: 184°C at 100kPa.
Flash point:68°C (Pensky Martin closed cup)
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: No information available.
Decomposition temperature: No information available.
Viscosity: No information available.

10. STABILITY AND REACTIVITY

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

Acute toxicity:	Not harmful and does not cause toxicity via oral, dermal and inhalation routes,
	according to available information.
Skin irritation:	Is considered a skin irritant according to available information.
Eye irritation:	Serious eye irritant according to available information.
Respiratory or skin	Not a skin sensitiser and not expected to be a respiratory sensitiser according to
sensitisation:	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 according to available data.
STOT-repeated exposure:	Not expected to cause toxicity to a specific target organ 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

Ecotoxicity:	Available information on this product indicates that this product is not classified
	as an acute aquatic toxicant.
	However, toxicity data is on 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-
	<u>e325674786b2</u>
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-
	<u>e325674786b2</u>
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

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.

14. TRANSPORT INFORMATION

Road and rail	Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG
transport:	Code) for transport by Road and Rail; NON-DANGEROUS GOODS.
Marine	Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous
transport:	Goods Code (IMDG Code) for transport by sea; NON- DANGEROUS GOODS.
Air transport:	Not classified as Dangerous Goods by the criteria of the International Air Transport Association
	(IATA) Dangerous Goods Regulations for transport by air; NON- DANGEROUS GOODS.

15. **REGULATORY INFORMATION**

Poison schedule (SUSMP):	Not a scheduled poison.
APVMA approval no.:	53038
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

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.	

Date of Issue: 23 February 2017

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.

[®]Methograin is a registered trademark of Bábolna Bioenvironmental Centre Ltd

End of SDS