



## SAFETY DATA SHEET

### Section 1 - Identification

<b>Product identifier</b>	<b>Tribunil® Selective Herbicide</b>	
<b>Other means of identification</b>		
<b>SDS No.</b>	795	
<b>Recommended use of the chemical and restrictions on use</b>		
<b>Recommended use</b>	Herbicide.	
<b>Restrictions on use</b>	No other uses are advised.	
<b>Details of manufacturer or importer</b>		
<b>Manufacturer</b>		
<b>Company name</b>	AgNova Technologies Pty Ltd	
<b>Address</b>	Unit 4, 482 Kingsford Smith Drive Hamilton, Queensland 4007 Australia	
<b>Telephone</b>	AgNova Technologies Pty Ltd	03 9899 8100 (office hours)
<b>Website</b>	agnova.com.au	
<b>E-mail</b>	info@agnova.com.au	
<b>Emergency phone number</b>	IXOM ERS	1800 033 111 (24 hours)
	Poisons Information Centre	13 11 26

### Section 2 - Hazard(s) identification

<b>Classification of the hazardous chemical</b>		
<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Not classified.	
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

#### Label elements, including precautionary statements

##### Hazard symbol(s)



Environment

##### Signal word

Warning

##### Hazard statement(s)

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

##### Precautionary statement(s)

###### Prevention

Avoid release to the environment.

###### Response

Collect spillage.

###### Storage

Not assigned.

###### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

##### Supplemental information

This is a pesticide product registered in Australia under the Australian Pesticides and Veterinary Medicines Authority (APVMA) and is subject to certain labeling requirements. These requirements may differ from the classification criteria and hazard information required for GHS compliant safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

##### Other hazards which do not result in classification

None known.

### Section 3 - Composition and information on ingredients

#### Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Methabenzthiazuron	18691-97-9	70%
Kaolin	1332-58-7	10 - 30%
Amorphous Silica (silica Gel, Precipitated Silica)	112926-00-8	< 10%
Other components below reportable levels		< 10%

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## Section 4 - First aid measures

### Description of necessary first aid measures

<b>Inhalation</b>	Move to fresh air. Call a poison centre or doctor/physician.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician or poison control centre immediately.
<b>Ingestion</b>	Rinse mouth. Call a poison centre or doctor/physician.
<b>Personal protection for first-aid responders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
<b>Symptoms caused by exposure</b>	Direct contact with eyes may cause temporary irritation.
<b>Medical attention and special treatment</b>	Treat symptomatically.

## Section 5 - Firefighting measures

### Extinguishing media

<b>Suitable extinguishing equipment</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing equipment</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Dust may form explosive mixture in air. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Hazchem code</b>	2Z
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## Section 6 - Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Keep upwind. Keep out of low areas. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>For emergency responders</b>	Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
<b>Methods and materials for containment and cleaning up</b>	Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Carefully mop or sweep up spill and place in container for disposal. Avoid the generation of dusts during clean-up. For waste disposal, see section 13 of the SDS.

## Section 7 - Handling and storage

<b>Precautions for safe handling</b>	Provide adequate ventilation. Wear appropriate personal protective equipment. Do not allow water soluble bags to be splashed with water or handled with wet gloves. Observe good industrial hygiene practices. Avoid prolonged exposure. Avoid release to the environment.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in tightly closed original container in a dry, cool and well-ventilated place. Do not store near food, feed, fertilisers, seeds, insecticides or fungicides. Store away from incompatible materials (see Section 10 of the SDS).

## Section 8 - Exposure controls and personal protection

<b>Control parameters</b>	Follow standard monitoring procedures.
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## Occupational exposure limits

### Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Components	Type	Value	Form
Amorphous Silica (silica Gel, Precipitated Silica) (CAS 112926-00-8)	TWA	10 mg/m <sup>3</sup>	Inhalable dust.
Kaolin (CAS 1332-58-7)	TWA	10 mg/m <sup>3</sup>	Inhalable dust.

### US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.

### UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m <sup>3</sup>	Respirable dust.

### Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), as updated

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	TWA	4 mg/m <sup>3</sup>	Inhalable dust.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Control banding</b>	Not available.
<b>Engineering controls</b>	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Individual protection measures, such as personal protective equipment (PPE)</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>Hygiene measures</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## Section 9 - Physical and chemical properties

<b>Physical state</b>	Solid.
<b>Form</b>	Wettable powder.
<b>Colour</b>	Beige.
<b>Odour</b>	Slight odour. Characteristic.
<b>Odour threshold</b>	Not available.
<b>pH</b>	8 - 10.5 (1% in water)
<b>Melting point/freezing point</b>	Not available.
<b>Boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower explosive limits</b>	
<b>Explosion limit - lower (%)</b>	Not available.
<b>Explosion limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	5.90E-06 Pa at 20 °C (active ingredient)
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.

<b>Solubility</b>	
<b>Solubility (water)</b>	Dispersible.
<b>Partition coefficient: n-octanol/water</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Particle characteristics</b>	Not available.
<b>Data relevant with regard to physical hazard classes</b>	No relevant additional information available.

#### Other physical and chemical parameters

<b>Bulk density</b>	0.29 / 0.34 g/mL (loose/packed)
<b>Explosive properties</b>	Under dusting conditions, this material may form explosive mixtures in air.
<b>Oxidising properties</b>	Not oxidising.

### Section 10 - Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Moisture. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidising agents. Strong acids and bases.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

### Section 11 - Toxicological information

#### Information on possible routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.

**Early onset symptoms related to exposure** Direct contact with eyes may cause temporary irritation.

**Delayed health effects from exposure** Not available.

**Acute toxicity** Based on available data, the classification criteria are not met.

Product	Species	Test Results
Tribunil® Selective Herbicide		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 5000 mg/kg (test results of a similar product)
<b>Inhalation</b>		
<i>Dust</i>		
LC50	Rat	5.12 mg/l, 4 Hours
<b>Skin corrosion/irritation</b>	Non-irritating (rabbit). Classification based on similar formulation.	
<b>Serious eye damage/irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Respiratory or skin sensitisation</b>		
<b>Respiratory sensitisation</b>	Not a respiratory sensitiser.	
<b>Skin sensitisation</b>	This product is not expected to cause skin sensitisation.	
<b>Germ cell mutagenicity</b>	Not expected to be mutagenic.	
<b>Carcinogenicity</b>	Not classifiable as to carcinogenicity to humans.	
<b>ACGIH Carcinogens</b>		
Kaolin (CAS 1332-58-7)	A4 Not classifiable as a human carcinogen.	

## IARC Monographs. Overall Evaluation of Carcinogenicity

Amorphous Silica (silica Gel, Precipitated Silica)  
(CAS 112926-00-8)

3 Not classifiable as to carcinogenicity to humans.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## Section 12 - Ecological information

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Methabenzthiazuron (CAS 18691-97-9)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	IC50	Green algae ( <i>Scenedesmus quadricauda</i> ) 0.033 mg/l, 72 hours <i>Scenedesmus subspicatus</i> 0.119 mg/l, 96 hours
Crustacea	LC50	<i>Daphnia magna</i> 30.6 mg/l, 48 hours
Fish	LC50	Rainbow trout ( <i>Oncorhynchus mykiss</i> ) 15.9 mg/l, 96 hours

**Persistence and degradability** Methabenzthiazuron is adsorbed strongly on soils and degrades slowly. Duration of residual activity is about 3 months. Methabenzthiazuron is unstable in strong acids and alkalis but has a DT50 greater than 1 year at pH 4-9 at 22 °C. It is stable to direct photolysis.

### Bioaccumulative potential

**Partition coefficient  
n-octanol / water (log Kow)**

Methabenzthiazuron 2.64

**Mobility in soil** No data available for this product.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. Not toxic to bees.

## Section 13 - Disposal considerations

**Disposal methods** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Residual waste** Dispose of in accordance with all applicable regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## Section 14 - Transport information

### ADG

**UN number** 3077  
**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methabenzthiazuron)  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards** Yes  
**Hazchem code** 2Z  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

### RID

**UN number** 3077

**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methabenzthiazuron)  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Label(s)** 9  
**Packing group** III  
**Environmental hazards** Yes  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**IATA**

**UN number** 3077  
**UN proper shipping name** Environmentally hazardous substance, solid, n.o.s. (Methabenzthiazuron)  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards** Yes  
**ERG Code** 9L  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Other information**

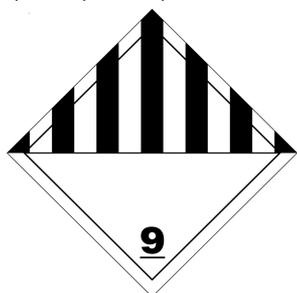
**Passenger and cargo aircraft** Allowed with restrictions.  
**Cargo aircraft only** Allowed with restrictions.

**IMDG**

**UN number** 3077  
**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methabenzthiazuron), MARINE POLLUTANT  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** Yes  
**EmS** F-A, S-F  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**ADG; IATA; IMDG; RID**



**Marine pollutant**



**General information** IMDG Regulated Marine Pollutant.  
Road and Rail Transport: Not dangerous goods under the ADG7 when being transported in IBCs or other receptacles <500 L (kg) (Special Provision AU01).

## Section 15 - Regulatory information

### Safety, health and environmental regulations

**National regulations** This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals.  
Poison Schedule: S5  
Signal Word CAUTION

#### Australia Medicines & Poisons Appendix B

Kaolin (CAS 1332-58-7)

#### High Volume Industrial Chemicals (HVIC)

Amorphous Silica (silica Gel, Precipitated Silica) 1000 - 9999 TONNES See the regulation for additional information.  
(CAS 112926-00-8)

#### Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10, as amended)

Not listed.

#### National Pollutant Inventory (NPI) substance reporting list

Amorphous Silica (silica Gel, Precipitated Silica) 2000 tonnes/yr Threshold Category: 2B  
(CAS 112926-00-8)

Kaolin (CAS 1332-58-7) 400 tonnes/yr Threshold Category: 2A  
2000 tonnes/yr Threshold Category: 2B  
400 tonnes/yr Threshold Category: 2A

#### Prohibited Carcinogenic Substances

Not regulated.

#### Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

#### Restricted Carcinogenic Substances

Not regulated.

#### Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

### International regulations

#### Stockholm Convention

Not applicable.

#### Rotterdam Convention

Not applicable.

#### Kyoto Protocol

Not applicable.

#### Montreal Protocol

Not applicable.

#### Basel Convention

Not applicable.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## Section 16 - Any other relevant information

**Issue date** 13-June-2023

**Revision date** 13-June-2023

## Disclaimer

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