



TAKEIN II ORGANOSILICONE SURFACTANT/PENETRANT

Safety Data Sheet

SECTION 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	TAKEIN II ORGANOSILICONE SURFACTANT/PENETRANT
Active Constituent	1020 g/L POLYETHER MODIFIED POLYSILOXANE
Other means of Identification	ORGANOSILICONE SURFACTANT/PENETRANT Grow Choice product code number: 735 5 AVPMA registered number: 61208
Recommended use of the chemical and restrictions on due	A non-ionic wetter /spreader/penetrant for use with agricultural pesticides.
Suppliers name, address and phone number:	Grow Choice Pty Ltd 113 Fitzroy Street TAMWORTH NSW 2340 Phone: 02 6766 3979 1800 817 676 Fax: 02 6766 2922 Email: admin@growchoice.com.au
Emergency phone number:	In Case Of Emergency Dial 000
Poisons Information Centre	Phone: 13 11 26 and speak to a Poisons Information Specialist. Fax:+61 2 9845 3597 http://www.chw.edu.au/poisons/contact.htm

SECTION 2: HAZARDS IDENTIFICATION (continued on page 2)

Classified as **HAZARDOUS** in accordance with the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004) 3rd Edition and the Globally Harmonized System of Classification and Labelling of Chemicals (the GHS). Considered **non-dangerous** for road and rail transport by the Australian Code for the Transport of Dangerous Goods Road and Rail (August 2014 edition)
Considered **DANGEROUS** for transport by sea and air in accordance with the IMDG Code 37-14 (refer Section 14)

Classification of hazardous chemical

Acute toxicity (Inhalation)	Category 4
Eye irritation	Category 2
Chronic aquatic toxicity	Category 2
Acute toxicity (Dermal)	Category 4

Signal Word **DANGER**

GHS Symbols



Exclamation Mark



Environment

General Precautionary Statements.

**If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use**

Hazard Statements

H319 Causes serious eye irritation

H332 Harmful if inhaled.

H312 Harmful in contact with skin

H411 Toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention	P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash hands, arms, face, neck and any exposed skin thoroughly after handling.
Response	P271 Use only outdoors or in a well-ventilated area P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection 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. P337 + P313 If eye irritation persists: Get medical advice/attention P302 + P352 IF ON SKIN: Wash with plenty of water/soap P312 Call a POISON CENTER or doctor/physician if you feel unwell. P363 Wash contaminated clothing before reuse. P391 Collect spillage.
Storage	P403+P235+P233 Store in a well-ventilated place. Keep cool. Keep container tightly closed.
Disposal	P405 Store locked up P501 Dispose of contents and container in accordance with local, regional and national regulations.

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical ingredients: CAS number and other unique identifiers: Concentration of ingredients:

Component	CAS No	Concentration
Polyether Modified Polysiloxane	134180-76-0	1020 g/L
Other ingredients, including water	(non-hazardous)	balance

SECTION 4: FIRST AID MEASURES

In Case Of Emergency Dial 000 and/or Poisons Information Centre: Phone: 13 11 26 and speak to a Poisons Information Specialist. Take this SDS and or DFU/Label with you or when calling the Poisons Information Centre.

Description of necessary first aid measures

Swallow	Rinse mouth thoroughly with water. Seek medical advice/attention. Do not induce vomiting unless under the direction of medical personnel.
Eye:	If product gets in eyes, wash it out immediately with water for at least 15 minutes. . Do not rub eye. Seek medical attention.
Skin:	Remove contaminated clothing and wash affected areas thoroughly with soap and water.
Inhaled	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Symptoms caused by exposure

Inhalation: A single exposure may cause the following adverse effects: Headache, Exhaustion and weakness.

Skin Contact: May cause discomfort and/or irritation.

Eye Contact: May cause irritation.

Ingestion: No specific symptoms known

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher. □
Specific hazards arising from the chemical	Hazardous combustion products include oxides of carbon and nitrogen, hydrogen chloride and phosgene. Non-combustible.
Special protective equipment and precautions for fire fighters	Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away. If it can be done safely, remove intact containers from the fire. Otherwise, use water spray to cool them. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or other extinguishing agent and spillage safely later.
Hazchem Code	2Z.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	<p>In case of spillage it is important to take all steps necessary to:</p> <ul style="list-style-type: none">• Avoid contact with the spilled material or contaminated surfaces.• Extinguish or remove any sources of ignition. W• When dealing with spills do not eat, drink or smoke and wear protective clothing and equipment.• Keep people and animals away.• Prevent spilled material from entering drains or watercourses.
Environmental precautions	<p>Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities.</p> <p>Reposition any leaking containers so as to minimise leakage. Dam and absorb spill with an absorbent material (eg sand or soil). Shovel the absorbed spill into drums.</p>
Methods and materials for containment and cleaning up	Contain spill and absorb with earth, sand, clay, or other absorbent material. Collect and store in properly labelled, sealed drums for safe disposal. Deal with all spillages immediately. Clean contaminated floors and objects thoroughly, observing environmental regulations. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.
6.4 Reference to other sections	<p>Information regarding safe handling see section 7.</p> <p>Information regarding personal protective equipment see section 8.</p> <p>Information regarding waste disposal, see section 13.</p>

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	<p>Safe work practices are recommended. Avoid contact with eyes and skin.</p> <p>When opening the container and preparing spray wear appropriate PPE (refer Section 8). Do not spray under high wind conditions.</p> <p>Hygiene measures:</p> <p>When using products, do not eat, drink or smoke.</p> <p>Contaminated work clothing should not be allowed out of the workplace.</p> <p>Wash hands thoroughly with soap and water after use and before eating, drinking, smoking/using tobacco, chewing gum, using the toilet or applying cosmetics.</p> <p>After each day's use, wash gloves, face shield or goggles and contaminated clothing.</p> <p>Avoid contact with eyes and skin.</p>
Conditions for safe storage, including any incompatibilities	<p>Keep out of reach of children, unauthorised persons and animals.</p> <p>Store in tightly sealed original containers in a dry secure place away from fertilizers, feed and food.</p> <p>Store out of direct sunlight and extreme temperature.</p> <p>Always read the label and any attached leaflet before use.</p>

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Appropriate engineering controls

No value assigned for this specific material by Safe Work Australia. No special requirements. Product is used outdoors
Control process conditions to avoid contact. Use only in well-ventilated areas. If necessary, use local exhaust ventilation to keep airborne concentration below the exposure limits.

Personal protective equipment (PPE):

When opening the container, preparing the spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC chemical resistant and face shield or goggles.

When using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and optional once chemical is prepared for use, elbow length PVC chemical resistant and face shield or goggles if protected from spray drift/contamination.

Face and Eye Protection: Face shield or goggles.

Clothing: Cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat.

Gloves: Elbow-length chemical resistant PVC gloves.

Respiratory: If airborne concentrations are likely to exceed the exposure standards above or if exposed to dust, an AS/NZS 1715/1716 approved respirator should be worn.

Recommended to use Australian and New Zealand Standard PPE:

Overalls AS 3765, Clothing for protection against Hazardous chemicals

Gloves: AS/NZS 2161, Industrial safety gloves and mittens (not electrical and medical gloves)

Goggles and face shield As/NZS 1337, Eye protectors for industrial applications.

Footwear AS/NZS 2210, Occupational protective footwear

Respirators AS NZS 1715 Selection, Use and Maintenance of Respiratory

Protective Devices

AS/NZS 1716, Respiratory Protective Devices

Requirements Concerning Training

Check State and/or Territory regulations that require people who use pesticides in their job or business to have adequate training in the application of the materials.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Colour	Pale yellow
Odour	Characteristic
pH (diluted solution):	6 - 8 in 4% solution
Flash point	102°C DIN 51758
Relative density	1.01 @ 25°C
Solubility(ies)	Soluble in water
Viscosity	40 - 90 mPa s @ 25°C

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Possibility of hazardous reactions	No hazardous reactions known.
Hazardous Polymerization	Hazardous polymerisation is not possible.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity: Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ = 3,200 mg/kg, Rat

Notes (dermal LD₅₀) LD₅₀ = 1,550 mg/kg, Rabbit

Notes (inhalation LC₅₀) LC₅₀ = 1.08 mg/l, Rat, (4 h)

Skin corrosion/irritation	Animal data: slightly irritating. (Rabbit)
Serious eye damage/irritation	Causes serious eye irritation. (Rabbit)
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	Not sensitising. (Guinea pig)
Germ cell mutagenicity:	
Genotoxicity - in vitro:	Based on available data the classification criteria are not met.
Carcinogenicity:	Based on available data the classification criteria are not met.
IARC carcinogenicity:	None of the ingredients are listed or exempt.
Reproductive toxicity	Based on available data the classification criteria are not met.
Reproductive toxicity –development	Based on available data the classification criteria are not met.
Specific target organ toxicity:	
single exposure (SE)	Not classified as a specific target organ toxicant after a SE
repeated exposure (RE)	Not classified as a specific target organ toxicant after a RE
Aspiration hazard	Based on available data the classification criteria are not met.

General information:

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

A single exposure may cause the following adverse effects: Headache. Exhaustion and weakness.

Ingestion	No specific symptoms known.
Skin	Contact May cause discomfort.
Eye contact	Irritating to eyes.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicology Assessment

Acute aquatic toxicity	Hazardous to the aquatic environment
Chronic aquatic toxicity	Toxic to aquatic life with long lasting effects
Aqua toxicity, fish	Species : rainbow trout Exposure duration: 96 h LC50: 2.1 mg/l /l
Aqua toxicity, invertebrates	Species: Daphnia magna Exposure duration: 48 h EC50: 1.1 mg/l
Aqua toxicity, algae / aquatic plants	Species: Scenedesmus subspicatus Exposure duration: 72 h EbC50: 28.2 mg/l Remarks: refer to biomass Species: Scenedesmus subspicatus Exposure duration: 72 h ErC50: 152.2 mg/l Remarks: growth rate

Persistence and Degradability No information available.

Bio accumulative Potential Not readily biodegradable.

Mobility in Soil No information available

Other adverse effects Use best management practices to limit uncontrolled release to waterways. Do not contaminate dams, waterways or sewers with this product or the

containers which have held this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of product	On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).
Disposal of Container	Do not use this container for any other purpose. Triple rinse containers; add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non-returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, puncture or shred and bury containers in local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SECTION 14: TRANSPORT INFORMATION

General Transport Information	It is considered good practice not to transport agricultural chemical products with food, food related materials and animal feed products.
Land	Considered non-dangerous for road and rail transport by the Australian Code for the Transport of Dangerous Goods Road and Rail (August 2014 edition)
Sea and Air	Considered DANGEROUS for transport by sea and air in accordance with the IMDG Code 37-14.
Air transport	
UN number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyethersiloxane)
Transport hazard class(es):	9
Packing group:	III
Environmental hazards :	Yes
Special precautions for user:	No
Sea transport IMDG-Code	
UN number:	UN 3082
UN proper shipping name:	ENVIRON MENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es):	9
Packing group:	III
Environmental hazards (Marine)	Yes
Special precautions for user:	Yes
EmS:	F-A,S-F
Stowage category A	

SECTION 15: REGULATORY INFORMATION

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP): Not Schedules

SECTION 16: ANY OTHER RELEVANT INFORMATION

This Safety Data Sheet (SDS) was completed February 2017 and replaces MSDS dated 20/04/11.

Acronyms:

AVPMA: Australian Pesticides and Veterinary Medicines Authority.
GHS: Globally Harmonised system of Classification and Labelling of chemicals
HSIS: Hazardous Substances Information System
NOHSC: National Occupational Health and Safety Commission
CAS No.: unique numerical identifier assigned by Chemical Abstracts Service (division of the American Chemical Society)
STEL Exposure standard - short term exposure limit.
AS/NZS: Australian Standards and New Zealand Standards for Personal protective equipment
ADI: Acceptable Daily Intakes For Agricultural And Veterinary Chemicals
ADG: Australian Dangerous Goods
IMDG: International Maritime Code of Dangerous Goods
IATA: International Air Transport Association

End of SDS

DISCLAIMER:

This SAFETY DATA SHEET has been developed according to the Work Health and Safety Regulations (WHS Regulations) Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals December 2011. The data, information and recommendations herein ("information") are represented in good faith and believed to be correct as of the date hereof. The purpose of this SAFETY DATA SHEET is to describe product in terms of their safety requirements. Grow Choice Pty Ltd makes no representation of merchantability, fitness for a particular purpose of application, or of any other nature with respect to the information or the product to which the information refers ("the product"). The information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purpose prior to the use of the product. The physical data shown herein are typical values based on the material tested. These values should not be construed as a guaranteed analysis of any specific lot or as guaranteed specification for the product or specific lots thereof.

Due care should be taken to make sure that the use or disposal of this product and/or its packaging is in compliance with Relevant Federal, State and Local