



MATERIAL SAFETY DATA SHEET

TITAN IMIDACLOPRID 200 INSECTICIDE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Titan Imidacloprid 200 Insecticide
Product Code	-
Other Names	-
Product Use	Agricultural insecticide for use as described on the product label.
Company Name	Titan Ag Pty Ltd
Address	3/14 Narabang Way Belrose NSW 2085
Telephone Number	02 9986 2943
Emergency Telephone	02 9986 2943

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE. NON DANGEROUS GOODS.

Classified as hazardous according to the criteria of ASCC.

Hazards	Xn – Harmful
Risk Phrases	R22 - Harmful if swallowed.
Safety Phrases	S20 - When using do not eat or drink. S24/25 - Avoid contact with skin and eyes. S36 - Wear suitable protective clothing.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient (common name)	CAS Number	Proportion
Imidacloprid	138261-41-3	200g/L
Glycerin	56-81-5	115g/L
Other ingredients deemed not to be hazardous	Proprietary	785g/L

4. FIRST AID MEASURES

Inhalation	If inhaled remove victim to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Seek medical attention if symptoms persist.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Immediately rinse mouth with water. Seek immediate medical attention.
Skin	If skin or hair contact occurs, immediately remove contaminated clothing and wash skin and hair thoroughly. Seek medical attention if symptoms persist.
Eyes	If in eyes, hold eyelids apart and flush the eye continuously with large amounts of water for at least 15 minutes. Seek medical attention if symptoms persist.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	For major fires call the Fire Brigade. Ensure that an escape path is available from any fire. Carbon dioxide, dry chemical, foam and water fog.
Hazardous Combustion Products	Fire decomposition products from this product may be toxic if inhaled.
Firefighting Equipment	Wear ASCC approved self-contained breathing apparatus and full protective clothing.
Unusual Fire or Explosion Hazards	There is no risk of an explosion from this product under normal circumstances if it is 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.
Hazchem Code	C1 – Combustible liquid. Not allocated.

6. ACCIDENTAL RELEASE MEASURES

Spills	In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. Stop leak if safe to do so, and contain spill. Absorb onto clay, sand, vermiculite or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labelled open top containers for recycling and dispose of promptly. Final clean-up with degreasing agent or detergent is advised. Launder protective clothing before storage or re-use.
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7. HANDLING AND STORAGE

Handling	Exercise normal care in handling. Avoid unnecessary skin and eye contact.
Storage	Store in the closed, original container in a dry well ventilated area. . Do not store for prolonged periods in direct sunlight. Keep container tightly sealed and do not store with incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards (ASCC)	Glycerin (mist): TWA: -ppm /10mg/m ³ STEL: - ppm / - mg/m ³
Engineering Controls	Use local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational

Respiratory Protection	<p>exposure limits are not exceeded.</p> <p>Use an ASCC approved full face supplied air respirator if high airborne concentrations of the material are present. See Australian Standards AS/NZS 1715 and 1716 for more information.</p> <p>Usually, no respirator is necessary when using this product.</p> <p>Avoid working in and breathing spray mist.</p>
Eye Protection	Protective glasses or goggles and face shield.
Skin Protection	Impervious elbow-length gloves, cotton overalls and washable hat.
Hygienic Practices	Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White to slightly beige liquid suspension
Odour	Mild, characteristic odour
Solubility in water	Miscible
Boiling Point	No information available
Freezing Point	No information available
Vapour Pressure	Not applicable
Vapour Density (Air = 1)	Not applicable
Specific Gravity (@20°C)	1.10
pH	7.0-8.5
Flash Point (closed cup)	>100°C
Flammable Limit – Lower	No information available
Flammable Limit – Upper	No information available
Auto-ignition Temperature	No information available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal storage conditions.
Incompatible Materials	Strong acids, strong bases and strong oxidising agents.
Hazardous Decomposition Products	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke, nitrogen and its compounds, hydrogen chloride gas and other compounds of chlorine.
Hazardous Polymerization Conditions to Avoid	Will not occur. Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

11. TOXICOLOGICAL INFORMATION

Toxicity	<p>Reproductive Effects: A three generation reproduction study in rats fed up to 700 ppm imidacloprid resulted in a NOEL of 100 ppm (equivalent to 8 mg/kg/day) based on decreased pup body weight observed at the 250 ppm dose level.</p> <p>Teratogenic Effects: Imidacloprid exposure is unlikely to be</p>
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	teratogenic in humans at expected exposure levels.
	Mutagenic Effects: Imidacloprid may be weakly mutagenic.
	Carcinogenic Effects: Imidacloprid is considered to be of minimal carcinogenic risk.
Routes of Exposure	Inhalation, ingestion, eye and skin
Health effects from likely routes of exposure	Inhalation: Harmful if inhaled. May cause irritation to upper respiratory tract. Ingestion: May be harmful in case of ingestion. Eye: Can cause irritation. Skin: Can cause irritation.
Effects of Overexposure	No information available.
Existing Conditions	No information available.
Aggravated by Exposure	
Carcinogenicity	No (ASCC, NTP, IARC)

12. ECOLOGICAL INFORMATION

Ecotoxicity	<p>Birds: Imidacloprid is toxic to upland game birds. Oral LD₅₀ (Japanese quail) =31mg/kg Oral LD₅₀ (Bob-white quail) =152mg/kg</p> <p>Aquatic Organisms: The toxicity of imidacloprid to fish is moderately low. LC₅₀ 96hr (Rainbow trout) = 211mg/L LC₅₀ 96hr (Carp) = 280mg/L EC₅₀ 48hr (Daphnia) = 85mg/L Imidacloprid is highly toxic to bees if used as a foliar application, especially during flowering, but is not considered a hazard to bees when used as a seed treatment.</p> <p>Environmental Fate: This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.</p>
Mobility	The half-life of imidacloprid in soil is 48-190 days, depending on the amount of ground cover (it breaks down faster in soils with plant ground cover than in fallow soils).

13. DISPOSAL CONSIDERATIONS

Disposal methods and containers	Instructions concerning the disposal of this product and its containers are given on the product label. Dispose according to applicable local and state government regulations.
Special precautions for landfill or incineration	Please consult your state Land Waste Management Authority for more information.

14. TRANSPORT INFORMATION

UN Number	Not applicable
Proper Shipping Name	Not applicable



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Dangerous Goods Class	Not applicable
Hazchem Code	Not applicable
Packing Group	Not applicable
Special Precautions	Not applicable

15. REGULATORY INFORMATION

Imidacloprid and glycerin are listed in the Australian Inventory of Chemical Substances (AICS).

SUSDP Classification: S5

16. OTHER INFORMATION

Last Revision of MSDS	Rev 1.0 (18/08/2008)
Prepared by	MSDS.COM.AU Pty Ltd www.msds.com.au
Abbreviations Used	IARC: International Agency for Research on Cancer ASCC: Australian Safety and Compensation Council NTP: National Toxicology Program (U.S.) OSHA: Occupational Safety and Health Administration (U.S.) STEL: Short term exposure limit TWA: Time weighted average

Emergency Contacts

Titan Ag Pty Ltd	02 9986 2943
Titan Ag Pty Ltd – Emergency Number	02 9986 2943
Police and Fire Brigade	000
Poisons Information Centre	13 11 26

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Please read instructions / label before using product.

This MSDS is prepared in accord with the ASCC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]