

SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	EMERGE Flowable Seed Treatment
Other Names:	Proper shipping name: Pesticide, liquid, toxic, N.O.S. (imidacloprid)
Recommended Use:	Insecticide seed treatment to control certain early season sucking and chewing pests
Company Details:	Syngenta Crop Protection Pty Limited ABN 33 002 933 717
Address:	Level 1, 2-4 Lyonpark Road MACQUARIE PARK NSW 2113 AUSTRALIA
Telephone Number:	(02) 8876 8444
Emergency Telephone Number:	24 hours - 1800 033 111

Section 2: HAZARDS IDENTIFICATION

Hazard Classification:	Classified as a hazardous chemical according to the Australian criteria for the classification of chemicals
Risk Phrases:	R22 – Harmful if swallowed. R43 – May cause sensitisation by skin contact
Safety Phrases:	–

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE	
Chemical Identity of Pure Substance:	Imidacloprid
Synonym:	–
CAS Number:	138261-41-3

MIXTURE		
Chemical Identity of Ingredients	CAS No	Proportion (%w/v)
Imidacloprid	138261-41-3	60
Glycerin	56-81-5	12.4
Other ingredients determined not to be hazardous	-	to 100

Section 4: FIRST AID MEASURES

Description of Necessary First Aid Measures:	<p>In case of poisoning by any exposure route get to a doctor or hospital quickly. Phone Poisons Information Centre on 131 126. Have the product label or SDS with you when calling or going for treatment.</p> <p>Ingestion: Obtain immediate medical advice as above. Give plenty of water to drink. Never give anything by mouth to an unconscious person.</p> <p>Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.</p> <p>Skin contact: Take off all contaminated clothing immediately. Wash off immediately with soap and water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.</p> <p>Inhalation: Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a doctor or Poisons Information Centre immediately.</p>
Poisoning Symptoms:	<p><i>Local:</i> None expected. <i>Systemic:</i> Apathetic state, depressed muscular tone, respiratory disturbances and trembling. Muscular cramps are also possible in severe cases of poisoning.</p>
Medical Advice:	<p><u>Information for the physician</u> The active ingredient, imidacloprid belongs to the following chemical group: chloronicotinyl or neonicotinoid <i>Therapeutic measures:</i> Basic aid, decontamination, symptomatic treatment.</p> <p><u>Treatment</u> <i>Local:</i> See First Aid Measures above. <i>Systemic:</i> Symptomatic (nicotine-like effects). Check blood pressure and pulse rate frequently, as bradycardia and hypotonia are possible. Provide supportive measures for respiratory function and cardiac action. Give artificial respiration if signs of paralysis appear. Additional therapeutic measures involve elimination of the substance from the body or acceleration of its excretion (gastrolavage, saline laxatives). <i>Antidote:</i> None known. <i>Contraindications:</i> Absorption promoting agents such as alcoholic beverages and milk. Oils and fats are of no particular use, as the active ingredient has low liposolubility.</p>

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	<p><i>Extinguishing media - small fires</i> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</p> <p><i>Extinguishing media - large fires</i> Alcohol-resistant foam or water spray.</p>
Hazards from Combustion Products:	<p>As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).</p>

Special Protective Precautions and Equipment for Fire Fighters:	<p>Exposure to decomposition products may be a hazard to health.</p> <p>Wear full protective clothing and self-contained breathing apparatus.</p> <p>Do not allow run-off from fire fighting to enter drains or water courses.</p> <p>Cool closed containers exposed to fire with water spray.</p>
Hazchem Code:	2X

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	<p>In case of spillage it is important to take all steps necessary to</p> <ul style="list-style-type: none"> • Avoid eye and skin contact • Avoid contamination of waterways
Methods and Materials for Containment and Clean Up:	<p>Procedure for spill</p> <ol style="list-style-type: none"> (1) Keep all bystanders away (2) Wear full length clothing and PVC gloves (3) Reposition any leaking containers so as to minimise further leakage (4) Dam and absorb spill with an absorbent material (eg sand or soil) (5) Shovel the absorbed spill into drums (6) Disposal of the absorbed material will depend upon the extent of the spill <ul style="list-style-type: none"> • For quantities up to 50 L of product bury in a secure landfill site • For quantities greater than 50 L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established (7) Decontaminate spill area with detergent and water and rinse with the smallest volume of water practicable

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling:	<p>Harmful if swallowed. Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container and using the product wear elbow-length PVC gloves.</p> <p>Wash hands after use. After each day's use, wash gloves.</p>
Conditions for Safe Storage:	<p>Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. When treated seed is stored it should be kept apart from other grain and the bags or other containers should be clearly marked to indicate the contents have been treated with this product. Do NOT allow seed treated with this product to contaminate seed intended for human or animal consumption. Bags that have held treated seed are not to be used for any other purpose. If the seed is not used immediately after treatment it should be stored in a dry, well-ventilated place.</p>

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

	<i>Component</i>	<i>Exposure limit</i>	<i>Value type</i>
National Exposure Standards:	glycerin mist	10 mg/m ³	8h TWA
Biological Limit Values:	No biological limits allocated		
Engineering Controls:	<p>Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use.</p> <p>If airborne mists or vapours are generated, use local exhaust ventilation controls.</p> <p>Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.</p> <p>Where necessary, seek additional occupational hygiene advice.</p>		
Personal Protective Equipment:	<p>The use of technical measures should always have priority over the use of personal protective equipment.</p> <p>When selecting personal protective equipment, seek appropriate professional advice.</p> <p>Personal protective equipment should be certified to appropriate standards.</p> <p>When opening the container and using the product wear:</p> <ul style="list-style-type: none"> • elbow-length PVC gloves. 		

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Red liquid	Boiling Point/Range:	About 100°C
Odour:	Slight characteristic	Freezing/Melting Point:	Not available
pH:	5.0 – 9.0 at 1 % w/v	Solubility:	Miscible in water
Vapour Pressure:	4 x 10 ⁻⁷ Pa (imidacloprid)	Specific Gravity or Density:	1.24 g/cm ³ at 20° C
Vapour Density:	Not available		

Flash Point:	> 100°C	Explosive Properties:	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	Not known	Oxidising Properties:	Not oxidising
Ignition Temperature:	Not available	Combustibility:	Not a combustible liquid
		Corrosiveness:	Not corrosive

Section 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	Avoid extreme heat.
Incompatible Materials:	Avoid strong oxidising agents.
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours. In a fire, formation of hydrogen chloride, hydrogen cyanide, carbon monoxide and nitrogen oxides can be expected.
Hazardous Reactions:	None known. Hazardous polymerisation does not occur.

Section 11: TOXICOLOGICAL INFORMATION

Health Effects from Likely Routes of Exposure:		
Acute:	Oral toxicity:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following single doses of undiluted product. (LD ₅₀ = 200 to 2000 mg/kg)
	Dermal toxicity:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following skin contact with undiluted product. (LD ₅₀ >4000 mg/kg)
	Inhalation:	LOW TOXICITY Tests on rats indicate this product is not harmful due to inhalation of undiluted product. (LC ₅₀ (4h) >1.86 mg/L air)
	Skin irritation:	IRRITANT (rabbit)
	Eye irritation:	IRRITANT (rabbit)
	Sensitisation:	SKIN SENSITISER (Guinea pig)
Chronic:	Imidacloprid technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, carcinogenic, teratogenic or reproductive effects was obtained.	

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity	<i>Toxicity to fish:</i>	Practically non toxic to fish <i>Oncorhynchus mykiss</i> (rainbow trout): LC ₅₀ 211 mg/L, 96 h
	<i>Toxicity to daphnia and other aquatic invertebrates:</i>	Slightly toxic to very highly toxic to crustaceans <i>Daphnia magna</i> (Water flea): EC ₅₀ = 85 mg/L, 48 h <i>Hyalella azteca</i> (amphipod): EC ₅₀ = 55 µg/L, 48 h
	<i>Toxicity to algae:</i>	Practically non-toxic to algae <i>Pseudokirchneriella subcapitata</i> (green algae): E _r C ₅₀ >100 mg/L, 72 h
Persistence and Degradability:	Imidacloprid is not persistent in soil and water. Imidacloprid has medium adsorption to soil.	
Mobility	Imidacloprid is immobile in soil.	
Environmental Fate (Exposure):	Incorporated into C, N, O and H containing organic molecules.	
Bioaccumulative Potential:	Imidacloprid has low potential for bioaccumulation.	

Section 13: DISPOSAL CONSIDERATIONS

Disposal Methods and Containers:	Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm 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.
Special Precautions for Landfill or Incineration:	Not applicable

Section 14: TRANSPORT INFORMATION

LAND TRANSPORT ADG			
UN Number:	2902	Packing Group:	III
UN Proper Shipping Name:	Pesticide, liquid, toxic, N.O.S. (imidacloprid)	Special Precautions for User:	None allocated
Class:	6.1	Hazchem Code:	2X
Subsidiary Risk:	None allocated		

SEA TRANSPORT IMDG			
UN Number:	2902	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Pesticide, liquid, toxic, N.O.S. (imidacloprid)	Packing Group:	III
Class:	6.1	Marine Pollutant:	Marine pollutant

AIR TRANSPORT IATA - DGR			
UN Number:	2902	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Pesticide, liquid, toxic, N.O.S. (imidacloprid)	Packing Group:	III
Class:	6.1		

Section 15: REGULATORY INFORMATION

APVMA Product Number:	63312
Poisons Schedule (SUSDP):	6

Section 16: OTHER INFORMATION

Date of preparation or last revision: May 2010

Source of Data: The information provided in this SDS is sourced from Syngenta internal studies which have been conducted according to Regulatory requirements including OECD and CIPAC Guidelines and EC Directives. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

Note: This product is a registered agricultural chemical and must, therefore, be used in accordance with the container label directions

CONTACT POINT: Regulatory Affairs Manager, Syngenta Crop Protection Pty Limited
(02) 8876 8444

24 HOURS EMERGENCY CONTACT: 1800 033 111

This Material Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

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