SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name	**Radicle 600 Flowable Seed Dressing Insecticide**
Company Name	Kenso Corporation (M) Sdn Bhd
Address	2 Bond Crescent, Forrest Hill, Auckland 0620 New Zealand
Telephone	0800 536 766
Emergency Telephone	**0800 CHEMCALL (0800 243 622) (24 hours)**
National Poisons Centre	**0800 POISON (0800 764 766) (24 hours)**
Use	For use as a seed treatment on cereals, forage brassicas, grass seed, maize, sweetcorn, potatoes, pumpkins and winter squash.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Pictograms	
Hazard Classification	**6.1C, 6.4A, 6.9B, 9.1A, 9.2A, 9.3A, 9.4A**
Priority Identifier	**TOXIC – HARMFUL** **ECOTOXIC** **KEEP OUT OF REACH OF CHILDREN**
Secondary Identifier	6.1C = May be fatal if swallowed, inhaled or absorbed through the skin 6.4A = Irritating to eyes 6.9B = Danger of serious damage to health by prolonged exposure 9.1A = Very toxic to aquatic organisms 9.2A = Very toxic in the soil 9.3A = Very toxic to terrestrial vertebrates 9.4A = Very toxic to terrestrial invertebrate

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	**CAS No**	**Proportion**
Imidacloprid	138261-41-3	60% w/v
Inert ingredients	secret	To 100% w/v

SECTION 4 – FIRST AID MEASURES

Ingestion	If swallowed, DO NOT induce vomiting. Seek medical advice or contact Poisons Information Centre (Phone: 0800 764 766)
Eye	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open.
Skin	Remove contaminated clothing and launder thoroughly before use. Wash affected areas or skin thoroughly with soap and water. Seek medical advice if irritation develops.
Inhalation	Remove to fresh air until recovered. If symptoms persist, seek medical advice.
Advice to Doctor	Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard	Non-flammable
HAZCHEM Code	2X
IER Guide No	47
Extinguishing Media	Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Fire Fighting Instructions	Wear full protective clothing and self-contained breathing apparatus.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions	Wear full respiratory protection (at least to organic vapour standard) eye protection, chemical resistant coveralls, boots and gloves.
Spillage	Stop leak if safe to do so, and contain spill. Prevent spillage from entering drains or water courses. Absorb spillage with clay, sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material

	spreading or going into drains or waterways. Sweep up and shovel or collect recovery product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area with a detergent based solution preventing runoff from entering drains. If a significant quantity of material enters drains, immediately advise regional council and emergency services. Ensure legality of disposal by consulting regulations prior to disposal. Do not dispose of undiluted chemicals on site. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to.
Environmental Precautions	Concentrate, solutions and washings must be prevented from entering surface water, drains or waterways.

SECTION 7 – HANDLING AND STORAGE

Storage	Keep out of reach of children. Store in original container, tightly closed, away from human and animal foodstuffs, medicines and remedies, seeds and fertilisers. Segregate from incompatible hazardous substances (Classes 1, 4 & 5). Store in a cool, dry, well ventilated place and protect from sunlight.
Handling	Avoid contact with skin and eyes and inhalation of concentrate or spray mist. When using, do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.
Record Keeping & Additional Requirements	All aspects of storage, handling, use, disposal and record keeping must be in accordance with NZS 8409:2004 'Management of Agrichemicals', and relevant local and regional council plans.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls	No special requirements. Product is used outdoors. 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. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Follow precaution statements on the label and the use and safety directions in Code of Practice for the Management of agrichemical NZS8409.
Personal Protection	Use only protective equipment bearing the mark of the Standards Association of Australia/ New Zealand. In case of heavy exposure, wear full respiratory protection (at least to organic vapour standard) eye protection, chemical resistant coveralls, boots and gloves.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form	Flowable liquid
Colour	Reddish
Odour	Aromatic odour
Flammability Limits	Non flammable
Density (at 20°C)	1.240
Miscibility	Disperse in water
Explosive properties	Not explosive

SECTION 10 – STABILITY AND REACTIVITY

Stability	Stable under normal conditions
Conditions To Avoid	Avoid extreme heat.
Incompatibility	Avoid storng oxidising agents
Decomposition	Decomposition will not occur
Polymerisation	Polymerisation will not occur

SECTION 11 – TOXICOLOGICAL INFORMATION

This section describes effects which could occur if this product is not handled in accordance with this data sheet.

Acute Toxicity	Acute Oral LD_{50} (rats) : 200-2000 mg/kg

	Acute Dermal LD_{50} (rabbit) : >4000 mg/kg Acute Inhalation LC_{50} (rats) (4hr) : >1.86 mg/L
Skin Irritation	Not irritating
Eye Irritation	Irritating to eyes
Sensitisation	Not a sensitizer (guinea pig).

SECTION 12 – ECOTOXICITY INFORMATION

This section describes effects which could occur if this material is not handled in accordance with this data sheet.

The following information is presented in respect of the active ingredient:

Ecotoxic Effects	**Acute Toxicity – Fish** LC_{50} (96 Hours) for golden orfe is 237 mg/L. LC_{50} (96 Hours) for rainbow trout is 211 mg/L. LC_{50} (96 Hours) for carp is 280 mg/L. **Acute Toxicity – Aquatic Invertebrate** EC_{50} (48 Hours) for Hyalella azteca is 0.055 mg/L. EC_{50} (48 Hours) for daphnia magna is 85 mg/L. **Acute Toxicity – Algae** EC_{50} (72 Hours) for green alga (Pseudokirchneriella subcapitata) is >100 mg/L. **Acute Toxicity – Bird** LD_{50} for Japanese quail is 31 mg/kg LD_{50} for Bobwhite quail is 152 mg/kg
Environmental Fate	Imidacloprid shows a medium adsportion to soil. Classified as immobile in soil. Not expected to leach.

SECTION 13 – DISPOSAL CONSIDERATIONS

Product	Dispose of this product only by using according to the label, or at an approved landfill or other approved facility. Refer to relevant local authority regulations ar assistance for disposal options.
Container	Ensure the container is empty. Triple rinse empty container and add rinsate to the spray tank. Recycle empty container through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

SECTION 14 – TRANSPORT INFORMATION

Dangerous Goods	
UN Number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains IMIDACLOPRID 60%)
Class	9
Subsidiary Class	None
Packaging Group	III
Additional Information	MARINE POLLUTANT
MTQ (Non-Commercial)	250 L

SECTION 15 – REGULATORY INFORMATION

HSNO Approval No	HSR100831
ACVM Approval No	P8824

SECTION 16 – OTHER INFORMATION

This SDS contains only safety-related information. For other data see product literature.

Contact Points	
Police, Ambulance and Fire Service	111
National Poisons Information Centre	0800 POISON (0800 764 766)
Hazardous Substances Emergency	0800 Chemcall (0800 243 622)