SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name	**Ken-Up Aquatic 360 Herbicide**
Company Name	Kenso Corporation (M) Sdn Bhd
Address	2 Bond Crescent, Forrest Hill, Auckland 0620 New Zealand
Telephone	(09) 410 0861
Emergency Telephone	**0800 CHEMCALL (0800 243 622) (24 hours)**
National Poisons Centre	**0800 POISON (0800 764 766) (24 hours)**
Use	A non-selective, non-residual herbicide suitable for use in drains and aquatic areas and for general use in agriculture, horticulture, forestry and non-cropland areas.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Pictograms	
Hazard Classification	**6.3A, 6.4A, 9.1B**
Priority Identifier	**KEEP OUT OF REACH OF CHILDREN**
Secondary Identifier	6.3A = May cause skin irritation. 6.4A = May cause eye irritation. 9.1B = Toxic to aquatic organisms.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	**CAS No**	**Proportion**
Glyphosate (present as isopropylamine salt)	1071-83-6	36% w/v
Water		To 100%
Other inert ingredients	secret	<10% w/v

SECTION 4 – FIRST AID MEASURES

Ingestion	Rinse mouth with water. Give plenty of water to drink. Do NOT induce vomiting. Seek medical assistance.
Eye	Hold the eyes and flush immediately with plenty of water. Seek medical advice if irritation develops.
Skin	Remove contaminated clothing and wash affected areas or skin with soap and water. Seek medical advice if irritation develops.
Inhalation	Remove to fresh air, keep warm and at rest. Give artificial respiration or oxygen if breathing is shallow or stopped. Get medical attention immediately.
Advice to Doctor	Treatment is symptomatic.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard	Not a fire or explosion hazard
HAZCHEM Code	2X
IER Guide No	47
Extinguishing Media	Extinguish fire with foam, dry powder, carbon dioxide or water spray.
Fire Fighting Instructions	Evacuate personnel to a safe area. Always wear positive-pressure self-contained breathing apparatus and full protective clothing. Do not allow water from fire-fighting to enter water supplies or drainage systems.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions	For appropriate personal protective equipment (PPE), refer to section 8.
Spillage	For clean up of a spill from a single shipping pack soak up with absorbent clays or other non-combustible absorbent material and place into containers for disposal. If applicable, wash the area with detergent and water. Prevent spillage from entering drains or water courses. Wear chemical

	resistant protective clothing as overalls, footwear, goggles and gloves. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dyke to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise regional council and emergency services. Ensure legality of disposal by consulting local, regional authority regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.
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.
Approved Handler	Where the substance is applied onto or into water and the water has the potential to leave the place containing the application area, any application of the substance must be under the personal control of an approved handler. Otherwise not required.
Record Keeping	Not required.
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	Well ventilated. 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 respiratory protection to a minimum of Organic Vapour cartridge type and/or 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, footwear and gloves.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form	Soluble liquid
Colour	Clear yellow colour
Odour	Slight ammoniacal odour
pH	4.8 – 5.2
Specific gravity	1.17
Flash point (^{o}C)	NA
Flammability Limits	Non combustible
Miscibility	Soluble
Oxidising properties	Not oxidising
Explosive properties	Not explosive

SECTION 10 – STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Incompatibility	No particular incompatibilities.
Decomposition	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas. Oxides of phosphorus and other phosphorus compounds. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. Hydrogen cyanide poisoning signs and symptoms are weakness, dizziness, headache, nausea, vomiting, coma, convulsions, and death. Death results from respiratory arrest. Hydrogen cyanide gas acts very rapidly; symptoms and death can both occur quickly.
Dangerous Reactions	Not known.

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 (Active Ingredient)	Acute Oral LD_{50} (rats) : 5600 mg/kg Acute Dermal LD_{50} (rabbits) : >5000 mg/kg LC_{50} (96h) for rainbow trout: 8.2-26 mg/L LC_{50} (96h) for forbluegill sunfish: 5.8-14 mg/L LD_{50} for bees: >0.1 mg/kg
Other Information	The Australian Acceptable Daily Intake (ADI) for glyphosate for a human is 0.3 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 30 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, August 2003).

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	Technical glyphosate acid is practically nontoxic to fish and may be slightly toxic to aquatic invertebrates. Do not spray in high winds. Do not contaminate dams, waterways or sewers with this product. Not toxic to fish.
Acute Toxicity – Fish	LC_{50} (96 hr) for rainbow trout is >989 mg/l. LC_{50} (96 hr) for carp is >895 mg/l
Acute Toxicity – Other Organisms	Birds: Not toxic to birds. LD_{50} for mallard ducks and bobwhite quail (diet) is >5620 mg/kg Bees: Not toxic to bees. LD_{50} >100 µg/bee.

SECTION 13 – DISPOSAL CONSIDERATIONS

Product	Dispose of this product only by using according to the label, or at an approved landfill or other approved hazardous substance disposal facilities.
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 glyphosate 36%)
Class	9

Subsidiary Class	None
Packaging Group	III
Additional Information	MARINE POLLUTANT
MTQ (Non-Commercial)	250 L

SECTION 15 – REGULATORY INFORMATION

HSNO Approval No	HSR000769
ACVM Approval No	P8338

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)