SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	**Ox 240 Herbicide**
Company Name:	Kenso Corporation (M) Sdn Bhd
Address:	2 Bond Crescent, Forrest Hill, Auckland 0620 New Zealand
Telephone Number:	(09) 410 0861
Emergency Telephone Number:	**(24 Hours) 0800 CHEMCALL 0800 243 622**
National Poisons & Hazchem Information Centre :	**0800 POISON (0800 764 766)**
Use:	For pre- and post-emergence control of broadleaf weeds and some annual grasses in applies, grapes, kiwifruit, stonefruit and forest nurseries.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard classification: 3.1D, 6.1E, 6.3B, 6.4A, 6.8A, 6.9B, 9.1B, 9.2A
Priority Identifier: HARMFUL
KEEP OUT OF REACH OF CHILDREN
Secondary Identifiers: 3.1D = Combustible liquid
6.1D = May be harmful if swallowed
6.3B = Irritating to skin
6.4A = Cause eye irritation.
6.9B = May cause reproductive/development damage from repeated oral exposure at high doses.
9.1B = Toxic to aquatic organisms
9.2A = Very toxic in the soil

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	**CAS number**	**Proportion**
Oxyfluorfen	42874-03-3	24 % w/v
Inert ingredients	secret	<10 % w/w
Hydrocarbon solvent	64742-94-5	To 100%

SECTION 4 – FIRST AID MEASURES

Swallowed	If swallowed, DO NOT induce vomiting. Seek medical advice or contact Poisons Information Centre (Ph 0800 POISONS 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 before use. Wash affected areas or skin thoroughly with soap and water. Seek medical advice if irritation develops.
Inhaled	Remove to fresh air until recovered. If symptoms persist, seek medical advice.

Advice to Doctor
Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards:	This product is classified as a combustible product. 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. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.
Extinguishing Media:	Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog.
Fire Fighting:	When fighting fires involving significant quantities of this product, wear a splash suit complete with self-contained breathing apparatus. Do not scatter spilled material with high pressure water jets.
Flash point:	91 ^{o}C
Upper Flammability Limit:	No data.
Lower Flammability Limit:	No data.
Autoignition temperature:	No data.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills and Disposal
Contain spill and absorb with sand or proprietary absorbent (vermiculite). Prevent from entering drains, waterways or sewers. Collect in sealed open top containers for disposal. The product is an herbicide and spills must be contained. The product is relatively toxic to fish and hence should be kept from entering water bodies. Triple rinse containers, add rinsate to the spray tank, then offer container for recycling/reconditioning (Agrecovery), or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. On-site disposal off concentrate is not acceptable.

SECTION 7 – HANDLING AND STORAGE

Store in the original container, tightly closed, away from animal and human foods food stuffs and food packaging, seeds, fertilisers and pesticides. Keep out of reach of children. After handling, remove protective clothing and equipment, wash hands before eating, drinking, chewing gum, smoking or using toilet. See product label for further handling and storage precautions.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

National Exposure Standards
The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m^3; 15ppm TWA, as total hydrocarbon. NOHSC has set the following exposure standard for N-methyl pyrrolidone : TLV (TWA) 103 mg/m^3, STEL 309 mg/m^3. SK 'SK' notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Engineering Controls
Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment
When opening the container, preparing spray and using the prepared spray wear wear chemical resistant coveralls and footwear , respiratory protection to a minimum of “Organic Vapour” standard, eye protection and elbow-length PVC or Nitrile gloves .
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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Amber
Odour:	Aromatic odour
Specific Gravity:	1.080
Vapour Pressure:	0.0267 mPa @ 25 ^{0}C for oxyfluorfen
Flammability Limits:	combustible liquid
Solubility	Emulsify in water

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability
Stable under normal conditions.

Hazardous Reactions
Keep away from strong explosives, combustibles and oxidising agents.

Hazardous Polymerization
Hazardous polymerisation is not possible.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicology Information
No harmful effects are expected if the precautions on the label and this MSDS are followed.

Acute Toxicity – Oral LD_{50} (rat) >5,000 mg/kg for oxyfluorfen

Acute Toxicity – Dermal LD_{50} (rabbit) >10,000 mg/kg for oxyfluorfen

Acute Toxicity – Inhalation LC_{50} (rat) (4hr) >5.4 mg/l

Other Information
The Australian Acceptable Daily Intake (ADI) for oxyfluorfen for a human is 0.025 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 2.5 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, September 2006).

SECTION 12 – ECOLOGICAL INFORMATION

Acute Toxicity – Fish
The following is data for the active ingredient, oxyfluorfen.
LC_{50} (96 hr) for trout is 0.41 mg/l.
LC_{50} (96 hr) for bluegill sunfish is 0.2 mg/l.

Acute Toxicity – Daphnia
LC50 (48 hr) for daphnia is 1.5 mg/l for oxyfluorfen.

Acute Toxicity – Other Organisms
Birds: Not toxic to birds. LD_{50} for bobwhite quail is >2,250 mg/kg
Bees: Not toxic to bees. LD_{50} >25 µg/bee.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal: Dispose of diluted material through normal application methods onto crop or waste areas. Dispose of concentrates through a designated hazardous substances disposal service or contact the local regional/district authority for disposal instruction**.**

SECTION 14 – TRANSPORT INFORMATION

UN Number (Sea Transport): 3082

IMO Proper Shipping: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Oxyfluorfen), Class 9, Packing Group III.

SECTION 15 – REGULATORY INFORMATION

HSNO Approval Number: HSR100984
HSNO Controls (inc. Tracking and Record Keeping):
See http://www.epa.govt.nz for controls.
ACVM Registration: P9166
ACVM Controls:
See www.foodsafety.govt.nz for registration conditions.

SECTION 16 – OTHER INFORMATION

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

CONTACT POINT:

Police Ambulance and Fire Service:	**Dial**	**111**
National Poisons Information Centre:	**Dial**	**0800 POISON (0800 764 766)**
Hazardous Substances Emergency Telephone Number:	**Dial**	**0800 CHEMCALL (0800 243 622)**