

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Kenso Agcare Sextant Selective Herbicide
Product Type: Group A Herbicide
Company Name: Kenso Corporation (M) Sdn Bhd
Address: Unit 3C, 59, Oxford Street, Bulimba Queensland 4171
Telephone Number: (07) 3217 9788
Facsimile Number: (07) 3217 9733
Emergency Telephone Number: 000 (Police or Fire Brigade)
13 11 26 (Poisons Information Centre)
Use: For the control of certain grass weeds in broadleaf crops as per Directions for Use Table.

SECTION 2 – HAZARDS IDENTIFICATION

Classified as hazardous according to criteria of NOHSC.

Risk Phrases: R20 Harmful by inhalation.
R22 Harmful if swallowed.
R41 Risk of serious damage to eyes.
R65 Harmful – may cause lung damage if swallowed.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

Safety Phrases: S20/21 When using do not eat or drink/smoke
S23 Do not breathe spray.
S24/25 Avoid contact with skin/eyes
S29/35 Do not empty into drains/Dispose of material and container in a safe way

SUSDP Classification: S6
ADG Classification: Class 9
UN Number: 3082

Emergency Overview

Physical Description & colour: Pale brown mobile liquid.
Odour: Petroleum
Major Health Hazards: Pure Quizalofop-p-ethyl is harmful by oral exposure. The reported oral LD₅₀ values of the compound are 1210 to 1670 mg/kg in male rats, and 1182 to 1480 mg/kg in female rats. Mice are only slightly less susceptible to the compound. Quizalofop-p-ethyl has reported LD₅₀ values of 1753 to 2350 mg/kg in male mice and 1805 to 2360 mg/kg in female mice. This product may cause serious damage to eyes, harmful by inhalation and if swallowed, skin irritant, if aspirated, may cause lung damage.

Potential Health Effects

Inhalation:

Short Term Exposure: Available data shows that this product is harmful, but symptoms are not available. In addition product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.

Skin Contact:

Short Term Exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.

Eye Contact:

Short Term Exposure: This product is a severe eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms such as swelling of eyelids and blurred vision may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment is likely to cause permanent damage.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. Because of the low viscosity of this product, it may directly enter the lungs if swallowed, or if subsequently vomited. Once in the lungs, it is very difficult to

remove and can cause severe injury or death. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.

Carcinogen Status:

ASCC: No significant ingredient is classified as carcinogenic by ASCC.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Quizalofop-p-ethyl	110646-51-3	10.3% w/v
Inert ingredients	secret	11 % w/w
Hydrocarbon solvent	64742-94-5	To 100%

SECTION 4 – FIRST AID MEASURES

Swallowed:	If swallowed, do not induce vomiting; seek medical advice immediately.
Skin:	Remove contaminated clothing, wash skin with plenty of soap and water. See a doctor if any signs or symptoms described in this document occur. Discard contaminated non-waterproof shoes and boots. Wash contaminated clothing before re-wearing.
Eyes:	Flush eyes immediately with plenty of fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. However, if irritation persists, see a doctor.
Inhaled:	Remove to fresh air until recovered. See a doctor if discomfort or irritation continues.

Advice to Doctor

Treat symptomatically. If vomiting occurs be wary of the onset of pulmonary pneumonitis caused by the solvents.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards: Product is classified as a C1 combustible product. There is no risk of an explosion from this product under normal circumstances. Combustion may release carbon dioxide, nitrogen oxides, and/or chlorine compounds.

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: Not flammable.

Upper Flammability Limit: No data.

Lower Flammability Limit: No data.

Autoignition temperature: No data.

Flammability Class: C 1

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. Clean up spill immediately. Collect in sealed open-top containers for disposal. Triple rinse containers, and add rinsings to the spray tank, then offer container for recycling / reconditioning, or puncture top, sites and bottom and dispose of in landfill in accordance with local regulations. On-site disposal of concentrate is not acceptable.

SECTION 7 – HANDLING AND STORAGE

Storage and Transport

Store in the closed, original container in a well-ventilated area away from children, animals, food, feedstuffs, seed and fertilizers.

Considered non hazardous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits

Exposure limits have not been established for any of the significant ingredients in this product.

Engineering Control

Use assisted ventilation in enclosed spaces if needed, especially storage areas.

Protective Equipment

Poisonous if swallowed. Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including elbow-length PVC gloves and face shield. If product contacts skin, immediately wash area with soap and water. After each use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. Wash gloves, face shield and contaminated clothing before reuse.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Pale brown liquid
Odour:	Hydrocarbon odour
pH:	Not applicable, non-aqueous formulation.
Vapour pressure:	No Data
Vapour density:	No Data
Boiling point/range:	Solvent > 150 °C.
Melting/freezing point:	<< 0 °C.
Solubility:	Miscible in water
Specific gravity - density:	0.95 ± 0.02
Flashpoint:	Not determined.
Explosive limits (air):	Not determined.
Ignition temperature:	Not determined.

SECTION 10 – STABILITY AND REACTIVITY

Chemical stability: Normally stable. Active may degrade in strong UV light.

Conditions to avoid: Very high or low temperatures.

Materials to avoid: Strong oxidising agents.

Hazardous decomposition products: Oxides of nitrogen and chlorine. Burning with limited oxygen may produce carbon monoxide.

Hazardous reactions: Not known. Does not polymerise.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity: Quizalofop-p-ethyl is harmful by oral exposure.
Oral LD₅₀ values are 1210 to 1670 mg/kg in male rats, and 1182 to 1480 mg/kg in female rats, 1753 to 2350 mg/kg in male mice and 1805 to 2360 mg/kg in female mice. Quizalofop-p-ethyl is not harmful by dermal exposure. Dermal LD₅₀ values are greater than 2000 mg/kg for mice, rats, and rabbits. F

Reported 4-hour inhalation LC50s values are 5.8 mg/L for technical quizalofop-p-ethyl and 75 mg/L for formulated product in rats.

Chronic toxicity: In a 1-year feeding study on dogs, doses of up to 10 mg/kg/day (the highest dose tested) caused no observed effects. In a 90-day feeding study in rats, doses of 6.4 mg/kg/day and higher produced liver lesions and increased liver weight. In a 2-year study of rats, doses of 5 mg/kg/day produced no observed effects.

Possible routes of exposure: Inhalation of spray mist is the most likely cause of exposure.

Range of effects. Excessive exposure may affect human health as follows:

Skin contact: Unlikely to have any effects if rinsed immediately. Prolonged contact may cause irritation and redness.

Eye contact: Unlikely to have any effects if rinsed immediately. Prolonged contact may likely to cause severe irritation and damage.

Inhalation/ingestion: Likely to cause nausea.

Dose/conc./conditions likely to cause injury: Several 10's of millilitres.

Delayed effects if any:

Relevant negative data: Not known to be carcinogenic, mutagenic, or teratogenic.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic organisms: Fish – Acute I (LC₅₀ ≤ 1 mg/L) Crustacea – Acute I (LC₅₀ ≤ 1 mg/L).

Algae – Acute I (EC₅₀ ≤ 1 mg/L). Plants – Variable, from Acute (Poaceae) to non-toxic.

Flora: Highly toxic to plants of the Poaceae family. Relatively non-toxic to others.

Fauna: Non toxic.

Soil organisms: Non toxic to earthworms.

Bees: Non toxic.

Long term:

Ozone effects: None recorded.

Persistence/degradation

Hydrolyses rapidly in soil to quizalofop acid, then degrades with a half-life of weeks rather than months.

Mobility

Not readily leached.

Bioaccumulative potential

Unknown but probably low.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal: Instructions concerning the disposal of this product and its containers are given on the product label. These should be carefully followed.

SECTION 14 – TRANSPORT INFORMATION

UN proper shipping name: Miscellaneous Dangerous Goods [Environmentally Hazardous Substance, Liquid, N.O.S. (Quizalofop-P-Ethyl)]

ADG Class & subsidiary risks: Class 9
ADG Packing Group: III
Special precautions: Do not store with foodstuffs.
Hazchem code: 2X.

SECTION 15 – REGULATORY INFORMATION

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database. This product is an Agricultural Chemical registered by the Agricultural Pesticides and Veterinary Medicines Authority.

SECTION 16 – OTHER INFORMATION

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

CONTACT POINT:

Police and Fire Brigade:	Dial	000
National Poisons Information Centre:	Dial	13 11 26 (from anywhere in Australia)
For 24 hour emergency response:	Dial	0439 933 556 Ask for Murray Goodlich