



IVORYCHEM PTE LIMITED
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Web: www.ivorychem.com
Co. Registration No. 200405572W
GST Registration No. 200405572W

MATERIAL SAFETY DATA SHEET

VIKING 48 SL HERBICIDE

Version: Global

Date Approved: 08/13/1998

Revision No: 1

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the EC directive, 91/155/EEC and other regulatory requirements. The information contained herein is for the concentrate as packaged, unless otherwise noted.

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: VIKING 48 SL HERBICIDE

ACTIVE INGREDIENT: Glyphosate

CHEMICAL FAMILY: Herbicide

MOLECULAR FORMULA: NA

SYNONYMS: NA

MANUFACTURER

IVORYCHEM PTE LTD
15 Beach Road, #02-09
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Singapore 189677
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Emergency Telephone Numbers:

Emergency Phone contact@ivorychem.com (Please refer local label for Emergency Numbers in your region).

COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Wt.%	PEL/TLV	EC No.	EC Class
Glyphosate	52315-07-8	48	None	None	None
Surfactant Blend	0000-00-0	52	None	None	None

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS:

- Clear amber liquid with an aromatic odour
- Causes eye irritation

POTENTIAL HEALTH EFFECTS: Effects from overexposure result from either inhaling or coming into contact with the skin.



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FIRST AID MEASURES

EYES: Flush with water for at least 15-20 minutes. If irritation occurs and persists, obtain medical attention.

SKIN: Wash with plenty of soap and water.

INGESTION: Immediately offer water to drink. Never induce vomiting or give anything by mouth to an unconscious person. Contact a medical doctor.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

NOTES TO MEDICAL DOCTOR: This product is not an inhibitor of cholinesterase.

ANTIDOTE: Treatment with atropine and oximes is not indicated.

FIRE FIGHTING MEASURES

FLASH POINT: None

EXTINGUISHING MEDIA: Water, foam, CO₂ or dry chemical.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Minimise use of water to prevent environmental contamination.

EXPLOSION HAZARDS: Slightly combustible. This material may support combustion at elevated temperatures.

FIRE FIGHTING PROCEDURES: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, phosphorous oxides, nitrogen oxides.

ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8, "Exposure Controls/Personal Protection". Keep unprotected persons and animals out of the area.

ENVIRONMENTAL PRECAUTIONS:

Small quantities: Low environmental hazard

Large quantities: Minimise spread. Keep out of drains, sewers, ditches and water ways. Notify authorities.

METHODS OF CLEANING UP:

Small quantities: Flush spilled area with water

Large quantities: Absorb in earth, sand or absorbent material. Dig up heavily contaminated soil. Collect in containers for disposal. Flush residues with small quantities of water. Minimise use of water to prevent environmental contamination.

HANDLING AND STORAGE

GENERAL PROCEDURES: Store in a cool, dry, well-ventilated place. Do not use or store near heat, open flame or hot surfaces. Store in original containers only. Keep out of reach of children and animals. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

EXPOSURE CONTROLS / PERSONAL PROTECTION



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ENGINEERING CONTROLS: No special requirement when used as recommended.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For dust exposure, wear chemical protective goggles or a face shield.

RESPIRATORY: For dust exposure wear, as a minimum, a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization). Respirator use and selection must be based on airborne concentrations.

PROTECTIVE CLOTHING: Depending upon concentrations encountered, wear coveralls or long-sleeved uniform and head covering. For larger exposures as in the case of spills, wear full body cover barrier suit, such as a PVC suit. Leather items - such as shoes, belts and watchbands - that become contaminated should be removed and destroyed. Launder all work clothing before reuse (separately from household laundry).

WORK HYGIENIC PRACTICES: Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking or using tobacco. Shower at the end of the workday.

GLOVES:

Wear chemical protective gloves made of materials such as rubber, neoprene or nitrile.

Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

COMMENTS: Personal protective recommendations for mixing or applying this product are prescribed on the product label. Information stated above provides useful, additional guidance for individuals whose use or handling of this product is not guided by the product label.

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Amber liquid

MOLECULAR WEIGHT: NA

WATER SOLUBILITY: Completely miscible in water

FLASH POINT: None

PH: 4.4 – 5.0

PARTITION COEFFICIENT: < 0.00 (active ingredient)

STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Excessive heat and fire. Reacts with galvanized steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

HAZARDOUS DECOMPOSITION: Thermal decomposition: Hazardous products of combustion

STABILITY: Stable under normal conditions of handling and storage.

POLYMERIZATION: Will not occur

TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY: Rat LD50: 5108 mg/kg body weight. Practically non-toxic

ACUTE DERMAL TOXICITY: Rat LD50: >5000 mg/kg. Practically non-toxic

SKIN IRRITATION: Essentially non irritating

EYE IRRITATION: Slight irritation



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CARCINOGENICITY: Mouse, oral, 24 months:
NOEL tumour: > 30000 mg/kg diet
NOAEL toxicity: ~5000 mg/kg diet
Tumours: None
Target organs/systems: liver
Other effects: decrease of body weight gain, histopathologic effects

ECOLOGICAL INFORMATION

ECO-ACUTE TOXICITY: Bees LC50/EC50 > 100 µg/bee
Invertebrates (Water Flea) LC50/EC50 11 mg/L
Fish (Trout) LC50/EC50 5.4 mg/L
Fish (Bluegill) LC50/EC50 7.3 mg/L
Birds (5-day dietary - Bobwhite Quail) LC50/EC50 > 5620 mg/kg diet
Birds (5-day dietary - Mallard Duck) LC50/EC50 > 5620 mg/kg diet

ECO-CHRONIC TOXICITY: Not Available

ENVIRONMENTAL FATE: The information presented here is for the active ingredient, paraquat dichloride. Low bioaccumulation potential. Persistent in soil. Not persistent in water. Immobile in soil. Sinks in water (after 24 h).

DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location, and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

EMPTY CONTAINER: Non-returnable containers which held this material should be cleaned, prior to disposal, by triple-rinsing. Containers which held this material may be cleaned by being triple-rinsed, and recycled, with the rinsate being incinerated.

TRANSPORT INFORMATION

Not hazardous under the applicable DOT, ICAO/IATA, IMO, TDG and Mexican regulations.
UN Class: 9
General Cargo
Safe for transportation by sea/air (in appropriate packaging)

REGULATORY INFORMATION

SARA TITLE III RULES

Section 311/312 Hazard Categories: Immediate
Section 302 Extremely hazardous substances: Not applicable
Section 313 Toxic Chemical(s): Not applicable



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OTHER INFORMATION

Section(s) Revised : New Format