



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

MATERIAL SAFETY DATA SHEET

STABOR 480 HERBICIDE

Version: Global
Date Approved: 08/13/1998
Revision No: 1

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: STABOR® 480 HERBICIDE
ACTIVE INGREDIENT: Alachlor
CHEMICAL FAMILY: Acetanilide Herbicide
MOLECULAR FORMULA: C₁₄H₂₀Cl NO_{3.22}
SYNONYMS: alachlor (BSI, (BSI, E-ISO, ANSI, WSSA, JMAF) alachlore (F-ISO).

MANUFACTURER

IVORYCHEM PTE LTD
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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
Alachlor	15972-60-8	48	None	None	None
Solvent		52	None	None	None

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Alachlor is an acetanilide herbicide of low acute toxicity but is considered a possible human carcinogen. It has the potential to be absorbed from the gastrointestinal tract and across intact skin. It is important that contamination be washed from the skin as alachlor is a sensitizer following repeated dermal exposure

POTENTIAL HEALTH EFFECTS: No reported cases but symptoms of poisoning would probably include nausea, vomiting, dizziness. Collapse and coma may occur in severe poisoning. Dermal irritancy and allergic dermatitis may be seen in susceptible individuals following exposure to spray-mists, liquids or particulates.

MEDICAL CONDITIONS AGGRAVATED: None presently known.

Company Registration No: 200405572W
Incorporated in the Republic of Singapore Under the Companies Act (Cap 50)



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FIRST AID MEASURES

EYES: Flush eye immediately with large amounts of water or normal saline, occasionally lifting eyelids, until no evidence of chemical remains. Seek medical attention if eye irritation persists.

SKIN: Remove contaminated clothing. Wash affected area immediately with soap and water. Seek medical attention if required.

INGESTION: If vomiting occurs keep head lower than hips to help prevent aspiration. Seek medical attention if required.

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

FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

FIRE FIGHTING PROCEDURES: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

HAZARDOUS DECOMPOSITION PRODUCTS: These products are carbon oxides (CO, CO₂).

ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Residues in containers should be emptied in a diluted form into a deep pit. Extreme care should be taken to avoid contamination of water resources. Decontamination of containers in order to use them for other purposes should not be permitted. Spillage of liquid formulations should be contained with absorbent material, which should be burned or buried in a deep pit. Remaining residues should be removed by thorough washing with detergent and water, ensuring that the run-off does not contaminate water resources.

HANDLING AND STORAGE

GENERAL PROCEDURES: Protective clothing should be used at all times. Adequate washing facilities should be available close at hand. Eating, drinking and smoking should be prohibited during handling and before washing after handling.

EXPOSURE CONTROLS / PERSONAL PROTECTION

GENERAL: Alachlor is an acetanilide herbicide of low acute toxicity but is considered a possible human carcinogen. It has the potential to be absorbed from the gastrointestinal tract and across intact skin. It is important that contamination be washed from the skin as alachlor is a sensitizer following repeated dermal exposure.

MANUFACTURE AND FORMULATION - TLV: No published information available. Adequate ventilation must be provided to reduce the extent of dermal and inhalation exposures. Adequate protective clothing must also be worn (Section 4.1.3).

MIXERS AND APPLICATORS: When opening the container and when mixing, care should be taken to avoid contact with eyes, skin and mouth. A clean protective suit should be worn, along with gloves, goggles and a face mask. Wash all the clothing, including the insides of gloves,



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before re-use. Mixing, if not mechanical, should always be carried out with a paddle of appropriate length. Splashes should be washed immediately from the skin or eyes with copious amounts of water. Before eating, drinking or smoking, hands and exposed skin should be thoroughly washed.

OTHER ASSOCIATED WORKERS: Persons associated with alachlor application should observe the precautions listed above under "Mixers and Applicators".

OTHER POPULATIONS LIKELY TO BE AFFECTED: With good agricultural practice, other populations should not be exposed to hazardous amounts of alachlor.

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Light Liquid with strong odor

DENSITY: Weighted average: 0.87 g/cm³

MELTING POINT: May start to solidify at 21°C (69.8°F) based on data for: Trade Secret. Weighted average: -55.82°C (-68.5°F)

BOILING POINT: The lowest known value is 154°C (309.2°F) (Hydrocarbon Petroleum aromatic). Weighted average: 155.56°C (312°F)

MELTING POINT: 39.5 - 41.5 °C

SOLUBILITY: Easily soluble in n-octanol.

Soluble in diethyl ether, acetone.

Partially soluble in hot water, methanol.

Very slightly soluble in cold water.

FLASH POINT: The lowest known value is OPEN CUP: 41°C (105.8°F). (Cleveland.). (Hydrocarbon Petroleum aromatic)

SOLIDIFYING POINT: Not available

VAPOR PRESSURE: Not available

VISCOSITY: Not available

pH: Not available

FLASH POINT: Not available

PARTITION COEFFICIENT: Not available

ADSORPTION COEFFICIENT: Not available

STABILITY AND REACTIVITY

MATERIALS TO AVOID: Hydrolysed by strong acids and alkali. Extremely reactive or incompatible with oxidizing agents. Slightly reactive to reactive with reducing agents.

Decomposes at 105 °C. Stable to ultra violet radiation.

TOXICOLOGICAL INFORMATION

TOXICITY, single dose: Oral LD₅₀ (rat) 930 - 1360 mg (technical)/kg b.w
Dermal LD₅₀ (rabbit) 13,300 mg (technical)/kg b.w.

CARCINOGENIC EFFECTS: In an 18 month feeding study with technical alachlor (26, 78 and 260 mg/kg b.w./day) an increased incidence of bronchio-alveolar tumours was observed in female CD-1 mice at 260 mg/kg b.w./day (the highest dose tested). No significant increase in tumour incidence was reported in male mice or in females at lower doses. The incidence of these tumours in the control group (female) was unusually low in comparison to historical control values



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and therefore, the lung adenomas were not considered to be treatment related. Two chronic feeding studies were conducted with alachlor in Long-Evans rats. The feeding levels used in the first study were equivalent to 14, 42 and 126 mg/kg b.w./day for 2 years. A dose-related increase was observed for nasal turbinate adenomas in both sexes. A significant increase in the incidence of malignant stomach tumors was also observed in both sexes at the highest feeding concentration. In addition, follicular cell tumours were increased in the thyroid of the male rats exposed to the highest dietary concentration. In the second study a complex dosing regimen was introduced: 126 mg/kg b.w./day for 5 to 6 months for some of the animals, the others remaining exposed for 2 years. In a second phase of the study, groups of rats received diets containing equivalents of 0.5, 2.5 and 15 mg/kg b.w./day for 2 years. The incidence of nasal turbinate adenomas was significantly elevated at 126 mg/kg b.w./day in both sexes. Malignant stomach tumours were also noted in females at this dose level. In addition, the follicular tumours of the thyroid were even more pronounced than in the first stud

ECOLOGICAL INFORMATION

Hydrocarbon Petroleum aromatic:

Toxic to aquatic organisms.

DISPOSAL CONSIDERATIONS

Decontamination of containers should not be permitted. Container must be either burned or crushed and buried below the topsoil. Keep clear of smoke when container is burned. Extreme care must be taken to avoid subsequent contamination of water sources when burying container and/or residues.

TRANSPORT INFORMATION

International transport regulations

UN NUMBER: UN1993

Land – Road/railway

PROPER SHIPPING NAME: 1993 Flammable liquid, n.o.s. PG:

ADR/RID CLASS: 9

Sea

PROPER SHIPPING NAME: Environmentally hazardous substance, liquid, n.o.s.

REGULATORY INFORMATION

LABELLING: All necessary directions, precautions and warnings for normal use of the product are included on the product label.

OTHER INFORMATION

Section(s) Revised : New Format