



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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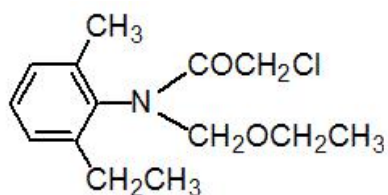
1. Chemical Product Identification

Common Name: Acetochlor 90% TC

Molecular Formula: $C_{14}H_{20}ClNO_2$

Molecular Weight: 269.77

Structural Formula:



Chemical Name: 2-chloro-N-ethoxymethyl-6'-ethylacet-o-toluidide

Form: Transparent liquid

Color: Light yellow

Odor: Odorless

CAS No.: 34256-82-1

2. Composition / Information On Ingredients

| Composition | CAS No. | Content % |
|-------------------|------------|-----------|
| Acetochlor | 34256-82-1 | 90 |
| Other ingredients | --- | 10 |

3. Hazards Identification

Likely routes of exposure: Skin contact, ingestion and inhalation.

Inhalation: Unlikely to cause harmful effects under normal conditions of handling and use,



but may cause sore throat, headache, nausea, abdominal distress or increased respiration if large quantities is inhaled.

4. First Aid Measures

Eye: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless directed to do so by a physician or poison control center. Have a person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.

Inhalation: Move person to fresh air. If person is not breathing, call an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Note to Physician: There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

5. Fire-Fighting Measures

Extinguishing agents:

Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Use spray or fog. Solid stream may cause spreading. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

Fire fighting:

Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire.

Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind.



Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal.

Dyke fire control water for later disposal. Do not scatter the material. Avoid pollution of waterways.

Do not use high volume water jet, due to contamination risk. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

Personal protective equipment:

Fire may produce irritating or poisonous vapours or gases (oxides of chlorine and sulphur) or other products of combustion. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

6. Accidental Release Measures

Personal precautions: Avoid contact with skin and eyes. Do not breathe in fumes. For personal protection see Section 8.

Environmental precautions: Acetochlor is toxic to fish and very toxic to algae. Is an environmentally hazardous substance. Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

Occupational spill: Do not touch spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals.

For spills: Soak up with absorptive material such as damp earth or sand or other suitable non-combustible absorbent material. Place the material into a clean, dry container and cover for subsequent disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. Keep spectators away and upwind. To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent bleach or caustic). Add the solution to the drums already collected. Label drums with its content and dispose it in accordance with local regulations. Open burning or dumping of this material is prohibited. Do not get water inside containers.

7. Handling And Storage

Handling: Harmful if swallowed. Avoid inhalation and contact with eyes and skin. Use with adequate ventilation. Do not handle broken packages without protective equipment. Wash



hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the product gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Seek medical advice. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination. Worker should shower at the end of each work day. Launder all clothing before it is re-used again.

Storage: Store in its original container in dry, cool, well-ventilated area. Avoid excess heat. Not to be stored next to foodstuffs and water supplies. Keep out of reach of children, uninformed persons and animals. Do not contaminate other pesticides and fertilizers.

8. Exposure Controls/Personal Protection

PERSONAL PROTECTIVE EQUIPMENT:

Respirator: An approved full-face respirator suitable for protection from spray or mists of pesticides is required. Limitations of respirator use specified by the approved agency and the manufacturer must be observed.

Clothing: Employee must wear appropriate protective (impervious) clothing, boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

Gloves: Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

Eye protection: The use of chemical resistant goggles or face shield.

Emergency eye wash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9. Physical and Chemical Properties

Appearance: Light yellow transparent liquid

Acidity: $\leq 0.1\%$

Moisture content: $\leq 0.2\%$

Melting point: 10.6°C

Boiling point: 172°C

Bulk density: 1.12 g/ml

Partition Coefficient: $\log P = 4.14$ (at pH 7, 20°C)



Vapour pressure: 0.022 mPa (25°C)

Solubility: 282 mg/l in water (20°C); In organic solvents: 5000 g/l in acetone , 500 g/l in ethyl acetate, 756 g/l in toluene, 100 g/l in ethanol (all at 20°C).

10. Stability and Reactivity

Stability: Considered stable under recommended warehouse and light conditions.

Hazardous decomposition: Emits toxic and irritant vapours under fire conditions.

11. Toxicological Information

Acute oral LD50 for rat: 1929 a.i.mg/kg.

Acute dermal LD50 for rat: >2000 a.i.mg/kg.

Inhalation LC50 (4 h) for rat: 3.99 a.i. mg/L.

Skin irritation: Non- irritating to skin (rabbits).

Eye irritation: Non- irritating to eyes (rabbits).

Skin sensitization: Contact sensitisation reactions observed in guinea pigs.

12. Ecological And Ecotoxicological Information

Effect on birds: moderate toxicity to birds, acute LD50 for Bobwhites quail is 928 a.i.mg/kg.

Effect on fish: moderate toxicity to fish, acute 96 hour LC50 for Rainbow trout is 0.36 a.i.mg/L.

Effect on aquatic invertebrates: moderate toxicity to aquatic invertebrates, acute 48 hour EC50 for Daphnia magna is 8.6 a.i.mg/L.

Effect on algae: high toxicity to algae, acute 72 hour EC50 for Pseudokirchneriella subcapitata is 0.00027 a.i.mg/L.

Effect on honeybees: low toxicity to honeybees, contact acute 48 hour LD50 is >200 a.i.µg/bee, oral acute 48 hour LD50 is >100 a.i.µg/bee.

Effect on earthworms: moderate toxicity to earthworms, acute 14 day LC50 for Eisenia foetida is 105.5 a.i.mg/kg.

13. Disposal Considerations

Disposal Procedures: Via licensed disposal company. Dispose of according to federal and local regulations.



14. Transport Information

Not applicable.

15. Regulatory Information

Not applicable.

16. Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.