

### MATERIAL SAFETY DATA SHEET

PRODUCT : Butachlor 50% EW

PRODUCT DESIGNATION : Herbicide

#### **Section 1. Product & Company Identification**

Common Name : Butachlor  
Grade : Formulation  
Active Ingredient : Butachlor  
Chemical Name of Active : N-butoxymethyl-2-chloro-2',6'-diethylacetanilide  
Ingredient (IUPAC)  
Chemical Family of A. I. : Chloroacetamide  
Molecular Formula of A. I. : C<sub>17</sub>H<sub>26</sub>ClNO<sub>2</sub>  
Molecular Mass of A. I. : 311.9 g/mol  
Manufacturer & Supplier : **M/s United Chemicals**  
**Head office:**B-371, 1<sup>st</sup> Floor, Meera Bagh, New Delhi,  
**Factory:**15/1, 15/2, 15/3, Industrial Estate, Vidisha,  
(M.P)  
Telephone Number : +91-11-25258770

#### **Section 2. Composition / Information on Ingredients**

<u>Name of Components</u>	<u>Concentration% w/w</u>
Butachlor a.i	50.00% w/w
Inert ingredient	50.00% w/w
<b>TOTAL</b>	<b>100.00% w/w</b>

#### **Section 3. Hazards Identification**

**More important danger for the man:** none

**Dangers for the environment:** toxic to aquatic; low accumulation;

**Physical-chemical dangers:** can decompose at high temperatures forming toxic gases.

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### Section 4. First Aid Measures

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**If in Eyes :** Flush immediately with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

**If in Skin :** Wash thoroughly with soap and water. Remove contaminated clothing and shoes and launder.

**If Inhaled :** Remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Get medical attention.

**If Swallowed :** Offer a glass of water or milk to drink. Call a physician or poison control center. Do not induce vomiting unless directed.

**Antidote:** There is no specific antidote. Treat symptomatically.

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### Section 5. Fire Fighting Measures

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**Extinguishing Media:** Water spray, foam, dry chemical carbon dioxide or Class B extinguish agent.

**Special Fire Fighting:** Firefighter or other exposed to vapors or products of combustion should wear full protective clothing and self-contained breathing apparatus.

Fire-fighting equipment should be thoroughly cleaned after use.

**Unusual Fire & Explosion Hazards:** Do not cut, drill, grind or weld on or near this container.

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### Section 6. Accidental Release Measures

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**Steps to be taken in case material is released or spilled:**

Evacuate area. Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Soak up material with absorbent material and dispose of in accordance with local regulations. Ventilate area and wash spill site after material pickup is complete.

**Disposal Method:**

Cautiously dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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### Section 7. Handling & Storage

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**Handling:** Keep out of reach of children. Avoid contact with the eyes, skin and clothing and avoid inhalation of product or spray mist. If in eyes, wash it immediately with water. After handling and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. Do not contaminate food or use on household tanks.

**Storage:** Store in the closed, original container in a dry, cool, well-ventilated area, secure area at minimum storage temperatures. Store in locked room or place away from children, animals, food, animal feed, seed and fertilizers.

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### Section 8. Exposure Control, Personal Protection

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#### Respiratory Protection :

Use MSHA/NIOSH approved respirator for herbicides.

#### Protective Clothing :

Skin contact should be prevented through the use of impervious gloves, footwear, long-sleeved clothing, wide brimmed hat and head covering. Remove contaminated work clothing and launder after each shift. Workers should shower at the end of each shift. Work clothing should be laundered separate from other garments.

#### Eye Protection

Eye contact with the material should be avoided through the use of chemical safety glasses, goggles or a face shield, selected in regard to exposure potential.

#### Other Protection :

An adequate supply of clean potable water should be available to allow thorough flushing of skin and eyes in event of contact with these compounds.

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### Section 9. Physical and Chemical Properties

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<b>Appearance / state</b>	: Brown or yellowish transparent oily liquid
<b>Colour</b>	: Brown or yellowish
<b>Odour</b>	: aromatic odor
<b>Melting point</b>	: -2.8 to 1.7 °C °C
<b>Vapour pressure</b>	: 2.4×10 <sup>-1</sup> mPa (25 )
<b>Boiling Point</b>	: 156 /0.5 mmHg

**Density** : 1.00-1.01  
**Solubility in water** : 20 mg/l (20 )

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### Section 10. Stability & Reactivity

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**Stability** : Stable up to 165 . °C

**Hazardous polymerization** : Will not occur

**Decomposition product** : When heated to decompose, emits

**Unusual Fire & Explosion Hazards** : When heated to decompose, they emit highly toxic fumes. **Incompatibility** : Hydrolyzed by strong alkalis and strong mineral acids.

**Extinguishing media** : Use waterfog, foam, alcohol foam, carbon dioxide and dry chemical.

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### Section 11. Toxicological Information

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**Acute Oral Toxicity** : LD<sub>50</sub> for rats : >5000 mg/kg

**Acute Dermal Toxicity** : LD<sub>50</sub> for rats : >2,000 mg /kg

**Acute Inhalation** : LC<sub>50</sub> (4h) for male and female rats : >1.5 mg/l

**Eye Irritation** : Non Irritating to Eyes

**Skin Irritant** : Non-irritating

**Skin sensitization** : Non sensitizer

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### Section 12. Ecological Information

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**Birds** Acute oral LD<sub>50</sub> for Mallard Ducks >4640 mg/kg

**Fish** LC<sub>50</sub> (96h) for Rainbow trout 0.52 mg/l , bluegill fish 0.44 mg/l

**Daphnia** LC<sub>50</sub> (48 h) 2.4 mg/l

**Bees** LC<sub>50</sub> (48h, Contact) >100 µg/bee

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### Section 13. Disposal Consideration

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**Product:** do not reuse product containers.

Dispose of product containers, waste containers, and residues according to local, state and environmental regulations

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### Section 14. Transport Information

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#### IMDG Classification

**Shipping name** : Environmentally Hazardous Substance, Liquid, N.O.S.  
**Class** : 9  
**Packing group** : III  
**UN number** : 3082  
**Marine pollutant** : Yes

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### Section 15. Regulatory Information

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**Risk phrase:** R10 Flammable.

**Safety phrase:**

**S2** Keep out of the reach of children.

**S20** When using, do not eat or drink

**S25** Avoid contact with eyes.

**S26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**S60** This material and its container must be disposed of as hazardous waste.

**S61** Avoid release to the environment. Refer to special instructions/safety data sheets.

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### Section 16. Other Information

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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 in 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 produces formulations(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

**Safety Division : UNITED CHEMICALS, SAFETY DIVISION**