

# MATERIAL SAFETY DATA SHEET

## BUTACHLOR 50% EC

“JOLT”

### Manufacturer/information service:

JAI SHREE RASAYAN UDYOG LTD.  
M-4, Aradhana Bhawan, Commercial Complex,  
Azadpur, Delhi-110 033  
Telephone No. : 91-11- 45750100-40  
Telefax : 91- 11- 45750140

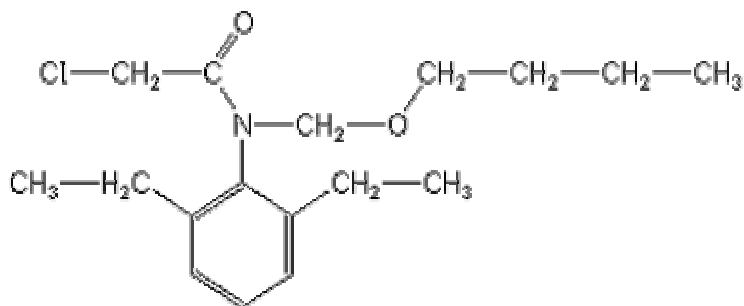
### 1. Chemical Product Identification

Product Name: Butachlor

Molecular Formula:  $C_{17}H_{26}ClNO_2$

Molecular Weight: 311.5

Structural Formula:



Chemical Name: N-butoxymethyl-2-chloro-2', 6'-diethylacetanilide

Color: Light yellow to Brown;

Odor: With a faint, sweet odour;

CAS No.: 23184-66-9

## 2. Composition / Information on Ingredients

### Composition CAS No. Content

S. No.	Ingredients	%age	CAS No.
1	Butachlor Technical ( based on 85% a.i.)	58.03 % w/w	23184-66-9
2	Emulsifiers A and B ( Mixture of Ethylene oxide condensate of Alkyl-phenol and Sulphonated alkyl benzene)	4.99 % w/w	68412-54-4 and 26264-06-2
3	Solvent (Kerosene)	36.98 % w/w	8008-20-6
	Total:	100.00 % w/w	

### 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.

### 4. First Aid Measures

Skin:

Remove contaminated clothing  
and shoes, flush with plenty of  
water and soap.

Eyes:

Flush with plenty of clear water for  
15-20 minutes.

Inhalation:

Move affect person to fresh air and  
keep at rest until recovered. If not  
breathing, give artificial respiration  
and get to a doctor.

Ingestion:

Do not induce vomiting; drink  
plenty of water. Then see doctor  
immediately.

### 5. Fire-Fighting Measures

Extinguishing media

To be used:

Water spray, foam, dry chemical  
powder and carbon oxide.

Don't use:

Not applicable

Particular risk:

None.

Measures of personal protection:	Safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants.
<b>6. Accidental Release Measures</b>	
Personal cautions:	The product is harmful if inhaled or swallowed. Will irritate the eyes, nose, throat and skin. Avoid inhaling spray mist. Keep people and animals away and upwind.
Cleaning methods	<b>EX:</b> clear the liquid formation. Transfer to a properly labelled deposit that will be closed and sealed until the recovery of elimination of the product.
Environmental cautions	<b>EX:</b> prevent the contamination of the floor and of beds of water.
<b>7. Handling And Storage</b>	
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.
<b>8. Exposure Controls / Personal Protection</b>	
Personal protective equipment:	Full-length overalls
Respiratory protection:	Approved respirator.
Protective gloves:	Rubber gloves
Eye protection:	Safety goggles or face shield.
Industrial hygiene:	Ventilation

## 9. Physical And Chemical Properties

Melting point:	> 5 °C
Density:	1.070(25 °C);
Water solubility:	20 mg/l (20 °C)
Vapor pressure:	0.6mPa
Other solubility:	Soluble in most organic solvents, including diethyl ether, acetone, benzene, ethanol, ethyl acetate, and hexane;
Acidity :	≤0.2% as H <sub>2</sub> SO <sub>4</sub>
Flash point:	>135 °C (Tag closed cup);

## 10. Stability And Reactivity

Conditions to avoid:	Avoid heat and fire.
Products to avoid:	Not applicable
Thermal decomposition:	Not applicable
Hazardous decomposition products:	Toxic gases.
Hazardous reaction:	None;

## 11. Toxicological Information

Acute oral	LD <sub>50</sub> for rat:>5010mg/kg
Acute dermal	LD <sub>50</sub> for rat:>2150mg/kg
Contact with the skin:	Moderate irritation to skin of rabbit;
Contact with the eyes:	Slight irritation to eyes
Inhalation:	Not applicable;
Sensitization:	No-sensitive;

## 12. Ecological And Ecotoxicological Information

Fish:	LC <sub>50</sub> (96 h) for rainbow trout 0.52, bluegill sunfish 0.44, carp 0.32, channel catfish 0.10□0.14, fathead minnow 0.31 mg/l. Daphnia LC <sub>50</sub> (48 h) 2.4 mg/l. LC <sub>50</sub> (96 h) for crayfish 26 mg/l.
Bird:	Acute oral LD <sub>50</sub> for mallard ducks >4640 mg/kg. Dietary LC <sub>50</sub> (5 d) for mallard ducks >10000, bobwhite quail 6597 mg/kg diet.
Bee.:	LD <sub>50</sub> (contact) >100µg/bee;

## 13. Disposal Considerations

Product:	Do not reuse product containers. Dispose of product containers, waste containers,
----------	---

and residues according to local, state and environmental regulations.

**14. Transport Information**

Class: 6.1 UN No.: 2769

**15. Regulatory Information**

Not applicable

**16. Other Information**

All information and instructions provided in this 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 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 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.