



## MATERIAL SAFETY DATA SHEET

PRODUCT : Atrazine 50% WP

PRODUCT DESIGNATION : Herbicide

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### Section 1. Product & Company Identification

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Common Name : Atrazine  
Grade : Formulation  
Active Ingredient : Atrazine  
Chemical Name of Active Ingredient (IUPAC) : 2-Chloro-4-Ethylamino-6-Isopropylamino-S-Triazine  
Chemical Family of A. I. : Herbicide  
Molecular Formula of A. I. : C<sub>8</sub>H<sub>14</sub>ClN<sub>5</sub>  
Molecular Mass of A. I. : 215.68 g/mol  
Manufacturer & Supplier : **M/s PERFECT SOLUTIONS**  
**Office Add:** B-371, Paschim Vihar, New Delhi - 110063 (India)  
**Factory Add:** 15/1, 15/2, 15/3 Industrial Estate, Vidisha - 464001 (M.P.)  
Telephone Number : +91 8375844625

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### Section 2. Composition / Information on Ingredients

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

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### Section 3. Hazards Identification

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#### Symptoms of Acute Exposure

Exposure to Atrazine 4L may cause irritation of the eyes, skin, or respiratory tract. If swallowed, nausea, vomiting, or diarrhea can result. A skin sensitization (allergic) reaction may occur insensitive individuals.



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## Section 4. First Aid Measures

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**SWALLOWED :** If victim is fully conscious, immediately give 1 or 2 glasses of water to drink and induce vomiting. Never give anything by mouth to an unconscious person. Apply artificial respiration if necessary. Seek medical attention immediately.

**First Aid for EYE Exposure :** Immediately flush eyes with large amounts of running water. Hold eye lids apart to rinse the entire surface of the eye and lids. Do not apply any medicating agents except on the advice of a physician. Get medical attention immediately if irritation persists.

**First Aid for SKIN Exposure :** Remove contaminated clothing and wash before reuse. Wash thoroughly, with plenty of soap and water, including hair and under fingernails do not apply any medicating agents except on the advice of a physician. Get medical attention immediately if irritation persists.

**First Aid for INHALATION :** : Remove from exposure. Seek medical attention. Apply artificial respiration if necessary.

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## Section 5. Fire Fighting Measures

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**Flash Point :** > 200OF (TCC) (Non-Combustible)

**Extinguishing Media :** CO<sub>2</sub>, dry chemical, water.

**Special Fire Fighting Procedures :** : Wear full protective clothing and self-contained breathing equipment (air-pack). Evacuate nonessential personnel from area. Prevent runoff if possible.

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## Section 6. Accidental Release Measures

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**Personal Precautions:** Use protective clothing. Avoid contact with skin, eyes and clothing. Remove contaminated clothes and shoes immediately

**Environmental precautions:** Do not allow to enter drains or water courses. When the product contaminates public waters, inform appropriate authorities in accordance with local regulations.

**Small dry spills:** sweep up with damp earth or sand or other suitable absorbent, such as sawdust, taking care not to raise a dust cloud. Place the material into a clean, dry container and cover for subsequent disposal.



**Large spills:** evacuate area. Wear appropriate protective clothing. Ventilate area, sweep up and place in an appropriate container. Wash contaminated surfaces to remove any residues. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Keep unnecessary people away.

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## Section 7. Handling & Storage

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### Handling:

Handle carefully so as to avoid container damage. Keep material in original containers. Store away from foodstuffs.

### Storage:

Do not put leaking packages into storage. Store at temperatures not exceeding 105°F.

### Other Precautions :

KEEP OUT OF REACH OF CHILDREN. Avoid contamination of feed and foodstuffs. Avoid contamination of water supplies, streams, and ponds.

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## Section 8. Exposure Control, Personal Protection

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**Engineering control measures:** If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

**Personal protective equipment:** It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

**Respirator:** An approved respirator suitable for protection from dusts and mists of pesticides is adequate. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

**Clothing:** Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

**Gloves:** Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

**Eye protection:** The use of goggles is recommended. 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.

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## Section 9. Physical and Chemical Properties

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<b>Appearance / state</b>	: white , Solid
<b>Colour</b>	: white
<b>Odour</b>	: odorless
<b>pH</b>	: 6-8
<b>Bulk Density</b>	: 0.50 g/l
<b>Oxidizing properties</b>	: Not oxidative
<b>Explosive properties</b>	: Non explosive. .

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## Section 10. Stability & Reactivity

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**Stability:** Only slightly sensitive to natural light and extreme temperatures. Relatively stable in neutral, weakly acidic and weakly alkaline media, but rapidly hydrolyzed to the hydroxy derivative in strong acids and alkalis, and at 70oC in neutral media. The product has a shelf life of 2 years, provided it is stored in its unopened, undamaged original containers in well ventilated and dry conditions away from sources of heat and spark generating equipment.

**Incompatibility:** Spray solutions containing this product should be mixed, stored or applied using stainless steel, aluminum, fiberglass or plastic-lined containers. Product is relatively stable in neutral, weakly acidic and weakly alkaline media. The product is compatible with most other pesticides and fertilizers when used at normal rates. However, a compatibility test is required before using with other products. Do not physically mix concentrate directly with other herbicides or pesticide concentrates; always dilute first. The product may flocculate in the presence of paraquat.

**Thermal decomposition:** Hydrogen chloride and toxic oxides of nitrogen are released when the product decomposes on heating.

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## Section 11. Toxicological Information

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**Acute Oral Toxicity :** LD<sub>50</sub> for rats : >2138 mg/kg

**Acute Dermal Toxicity :** LD<sub>50</sub> for rats : >2000 mg /kg

**Acute Inhalation :** LC<sub>50</sub> (4h) for male and female rats : >5.8 mg/l



**Eye Irritation** : slightly 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 Bobwhite Quail and Mallard Ducks >5000 mg/kg

**Fish** LC<sub>50</sub> (96h) for Rainbow trout 4.3 mg/l

**Daphnia** LC<sub>50</sub> (48 h) >6.9 mg/l

**Bees** LC<sub>50</sub> (oral) : > 97 µg / bee.

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## Section 13. Disposal Consideration

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**Pesticide disposal:** Contaminated absorbents, used containers, surplus product, etc., should be burnt in an incinerator, preferably designed for pesticide disposal. Hydrolysis under alkaline conditions (10% w/v sodium hydroxide) is a suitable method to dispose of small quantities of atrazine. Heating speeds up the process. After hydrolysis, dilute and dispose of via the sewage system.

**Package product wastes:** Emptied containers retain vapor and product residues. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed. Combustible containers should be disposed of in pesticide incinerators. Non-combustible containers must first be triple-rinsed with water, punctured and transported to a scrap metal facility for recycling or disposal.

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## Section 14. Transport Information

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### IMDG Classification

**Shipping name** : Environmentally hazardous substance, solid, n.o.s.  
(Atrazine 50%).

**Class** : 9

**Packing group** : III

**UN number** : 3077

**Marine pollutant** : Yes

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## Section 15. Regulatory Information

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## **Risk phrases:**

**R20/22** Harmful by inhalation and if swallowed.

**R 36** Irritating to eyes.

**R40** Possible risks of irreversible effects.

**R43** May cause sensitization by skin contact.

## **Safety phrases:**

**S 2** Keep out of reach children.

**S 46** If swallowed, seek medical advice immediately and show this container and label.

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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.

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