



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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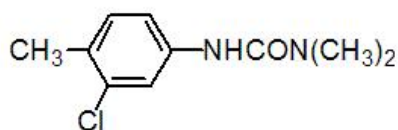
1. Chemical Product Identification

Product Name: Chlorsulfuron 75% DF

Molecular Formula: C₁₂H₁₂ClN₅O₄S

Molecular Weight: 357.8

Structural Formula:



Chemical Name: 1-(2-chlorophenylsulfonyl)-3-(4-methoxy-6-methyl-1,3,5-triazin-2-yl) urea

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Chlorsulfuron	64902-72-3	75
Other ingredients	---	25

3. Hazards Identification

More important danger for the man: none

Dangers for the environment: toxic to aquatic.

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 affected 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.

Environmental cautions EX: prevent the contamination of the floor and of beds of water.

6. Accidental Release Measures

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

EX: 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

EX: prevent the contamination of the floor and of beds of water.

7. Handling And Storage

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.

Storage: Store in the closed, original container in a dry, cool, well-ventilated area, out of direct sunlight. Store in locked room or place away from children, animals, food, animal feed, seed and fertilizers.

8. Exposure Controls/Personal Protection

PEL: not applicable

Personal protective equipment: full-length overalls

Respiratory protection: approved respirator.

Protective gloves: rubber gloves



Eye protection: safety goggles or face shield.

Industrial hygiene: adequate ventilation.

9. Physical and Chemical Properties

Appearance: White spherical particles

Odor: Slight odor

Suspensibility: $\geq 80.0\%$

Fineness (through 75 μm sieve): $\geq 98\%$

Dissolve time: $\leq 180\text{s}$

pH: 6.0-8.0

Water content: $\leq 3.0\%$

10. Stability and Reactivity

Conditions to avoid: high temperature.

Products to avoid: not applicable.

Thermal decomposition: Decomposes at 192°C.

Hazardous decomposition products: nitride, chloride and carbon dioxide.

Hazardous reaction: none.

11. Toxicological Information

Acute oral LD50 for rat: >10000 a.i.mg/kg.

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

Inhalation LC50 (4 h) for rat: >5.3 a.i. mg/L.

Skin irritation: Non-irritant to skin (rabbits)

Eye irritation: Non-irritant to eyes (rabbits)

Skin sensitization: Not a skin sensitiser (guinea pigs)

12. Ecological And Ecotoxicological Information

Effect on birds: moderate toxicity to birds, acute oral LD50 for Japanese quail is 272 a.i.mg/kg.

Effect on fish: moderate toxicity to fish, acute 96 hour LC50 for Rainbow trout is 20 a.i.mg/L.

Effect on aquatic invertebrates: moderate toxicity to aquatic invertebrates, acute 48 hour



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EC50 for Daphnia magna is 67 a.i.mg/L.

Effect on algae: moderate toxicity to algae, acute 72 hour EC50 for Scenedemus subspicatus is 0.024 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 177.4 a.i.µg/bee.

Effect on earthworms: low toxicity to earthworms, acute 14 day LC50 is >1000 a.i.mg/kg.

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

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.