

COTTOSET 580WDG™ MATERIAL SAFETY DATA SHEET

SECTION 1 Chemical product and Company identification

Product Name: CottoSet 580WDG™ (Fluometuron + Prometryn + Glyphosate)

Chemical name:

Fluometuron: 1,1-dimethyl-3-(a,a,a-trifluoro-*m*-tolyl)urea

Prometryn: N²,N⁴-di-isopropyl-6-methylthio-1,3,5-triazine-2,4-diamine

Glyphosate: N-(phosphonomethyl)glycine

Formula:

Fluometuron: C₁₀H₁₁F₃N₂O

Prometryn: C₁₀H₁₉N₅S

Glyphosate: C₃H₈NO₅P

Product Use: Commercial Herbicide

Supplier: SINERIA HOLLAND BV

Randwycksingel 20-A015

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SECTION 2 Composition/Information on Ingredients

| <u>Product Name</u> | <u>Content (%)</u> | <u>CAS RN</u> |
|---------------------|--------------------|---------------|
| Fluometuron | 25% | 2164-17-2 |
| Prometryn | 25% | 7287-19-6 |
| Glyphosate | 8% | 38641-94-0 |

SECTION 3 Hazards Identification

HARMFUL IF INHALED. MAY CAUSE ALLERGIC SKIN REACTION.

Potential health effects: Likely route of exposure: skin contact, eye contact, inhalation

- Eye contact, short term: not expected to produce significant adverse effects when recommended use instructions are followed.

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- Skin contact, short term: may cause allergic skin reaction.
- Inhalation, short term: may be harmful if inhaled.

SECTION 4 First Aid Measures

If in eyes: 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.

If on skin: Rinse skin immediately with plenty of water for 15-20 minutes. Take off contaminated clothing. Call a Poison Control Center or doctor for treatment advice.

If inhaled: 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.

If swallowed: Immediately offer water to drink. Call a Poison Control Center or doctor immediately. Do not induce vomiting unless told to do so by a Poison Control Center or doctor. Do not give anything by mouth to an unconscious person.

SECTION 5 Fire Fighting Measures

Flash point: none.

Suitable extinguishing media: Water, foam, dry chemical and carbon dioxide.

Special fire-fighting procedures: Minimise use of water to prevent environmental contamination. Wear protective equipment and self-contained breathing apparatus.

Unusual fire and explosion hazards: Toxic and corrosive hydrogen chloride and oxides of nitrogen can be released.

SECTION 6 Accidental release measures

General and disposal: Use proper protective equipment to minimize personal exposure. Take all necessary action to prevent and to remedy the effects of the spill. Ensure that the disposal is in compliance with regulations.

Land spill or leaks:

Small spill: Absorb with an inert absorbent material such as granular clay, saw dust or pet litter. Sweep up carefully while avoiding the formulation of a dust cloud. Place in an approved chemical waste container for disposal. Rinse spill area with small amount of soapy water. Contain and absorb the rinsate with inert absorbents and place into the same disposal container. Area can be washed with water to remove the last trace residue. Do not allow water to contaminate water supplies or sewers.



Large spill: Eliminate all ignition sources. Stop leak if you can do so without coming into contact with spilled material. All equipment used to clean up spill should be grounded. Prevent entry into waterways, sewers, basements or confined areas. Inform appropriate authorities immediately if contamination occurs.

Note: Minimize use of water to prevent environmental contamination.

SECTION 7 Handling and storage

Handling: Avoid contact with eyes or clothing. Do not use near heat or open fire.

Users Should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage: Store in a cool, well ventilated and dry place out of reach of children. Keep product in original container tightly closed. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

Minimum shelf life: 2 years

SECTION 8 Exposure controls/Personal protection

Engineering controls: Provide local exhaust ventilation.

Eye and face protections: Safety glasses, splash goggles or face-shield.

Skin protections: Long-sleeved shirt and long pants waterproof gloves chemical-resistant footwear. Wash contaminated skin promptly. Launder contaminated clothing and clean protective equipment before reuse. Wash hand thoroughly after handling.

Respiratory protection: Respiratory protection is not normally required. Use dust/ mist filtering respirator or a NIOSH approved respirator with any N, R, P, or HE filter if PEL is exceeded.

SECTION 9 Physical & Chemical properties

Appearance: Off-white granules

pH: 5-9

SECTION 10 Stability & Reactivity

Stability: Stable under normal condition

Hazardous Decomposition: Thermal decomposition may lead to hazardous products of combustion, like toxic and corrosive hydrogen chloride and oxides of nitrogen. When heated may give off toxic fumes.

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SECTION 11 Toxicological Information

Fluometuron

- *Oral*: Acute oral LD₅₀ for rats >6000 mg/kg.
- *Skin*: Acute percutaneous LD₅₀ for rats >2000 mg/kg and >10000 mg/kg rabbits.
- Mild skin and eye irritant (rabbits).
- Not a skin sensitiser (guinea pigs).
- *NOEL* (2 y) for rats 19 mg/kg b.w. daily
- *NOEL* (2 y) for mice 1,3 mg/kg b.w. daily
- *NOEL* (1 y) for dogs 10 mg/kg b.w. daily.

Prometryn

- *Oral*: Acute oral LD₅₀ for rats >2000 mg/kg.
- *Skin*: Acute percutaneous LD₅₀ for rats >3100 mg/kg and >2020 mg/kg rabbits.
- *Inhalation*: Acute inhalation LC₅₀ (4 h) for rats >5170 mg/m³
- Not irritant to the skin and slightly irritant to the eyes (rabbits).
- Not a skin sensitiser (guinea pigs).
- *NOEL* (2 y) for rats 750 ppm
- *NOEL* (2 y) for dogs 150 ppm
- *NOEL* (21 d) for mice 10 ppm

Glyphosate

- *Oral*: Acute oral LD₅₀ for rats 5600 mg/kg.
- *Oral*: Acute oral LD₅₀ for mice 11300 mg/kg.
- *Oral*: Acute oral LD₅₀ for goats 3530 mg/kg.
- *Skin*: Acute percutaneous LD₅₀ for rabbits >5000 mg/kg
- *Inhalation*: Acute inhalation LC₅₀ (4 h) for rats 4.98 mg/l_t air
- Not irritant to the skin (rabbits).
- Irritant to the eyes (rabbits).



- Not a skin sensitiser (guinea pigs).
- *NOEL*: In 2 y feeding trials, no ill-effects were observed in rats receiving 410 mg/kg diet daily (average) and in 1 y feeding trials,
- *NOEL*: No ill-effects were observed in dogs receiving 500 mg/kg daily (highest dose treated).

SECTION 12 Ecological Information

Fluometuron

Birds

- LD₅₀ for mallard ducks 2974 mg/kg
- Dietary LC₅₀ (8 d) for Japanese quail 4620 mg/kg diet
- Dietary LC₅₀ (8 d) Mallard ducks 4500 mg/kg diet
- Dietary LC₅₀ (8 d) Ring-necked pheasants 3150 mg/kg diet

Fish

- LC₅₀ (96 h) for Rainbow trout 30 mg/l
- LC₅₀ (96 h) for Bluegill sunfish 48 mg/l
- LC₅₀ (96 h) for Catfish 55 mg/l
- LC₅₀ (96 h) for Crucian carp 170 mg/l

Daphnia sp.: LC₅₀ (48 h) 10 mg/l.

Algae: EC₅₀ (3 d) 0.16 mg/l.

Bees: LD₅₀ (oral) >155 µg/bee; (topical) >190 µg/bee.

Worms: LC₅₀ (14 d) for earthworms >1000 mg/kg soil.

Prometryn

Birds

- Dietary LC₅₀ (8 d) for Bobwhite quail >5000 ppm
- Dietary LC₅₀ (8 d) for Mallard ducks >500 ppm.

Fish

- LC₅₀ (96 h) for Rainbow trout 5.5 mg/l
- LC₅₀ (96 h) for Bluegill sunfish 7.9 mg/l.

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Daphnia sp.: LC₅₀ (48 h) 12.66 mg/l.

Algae: EC₅₀ (5 d) for *Selenastrum capricornutum* 0.023 mg/l.

Other aquatic species: EC₅₀ for mysid shrimp (*Mysidopsis bahia*) 1.7 mg/l.

Bees: Not toxic to bees. LD₅₀ (oral) >99 µg/bee; (contact) >130 µg/bee.

Worms: LC₅₀ (14 d) for earthworms 153 mg/kg soil.

Glyphosate

Birds

- Acute oral LD₅₀ for Bobwhite quail >3851 mg/kg
- Dietary LC₅₀ (8 d) for Quail and Ducks >4640 mg/kg diet

Fish

- LC₅₀ (96 h) for Trout 86 1000 mg/l
- LC₅₀ (96 h) for Bluegill sunfish 120 mg/l
- LC₅₀ (96 h) for Harlequin fish 168 mg/l
- LC₅₀ (96 h) for Sheepshead minnow >1000 mg/l

Daphnia sp.: LC₅₀ (48 h) 780 mg/l.

Algae: EC₅₀ (72 h) for *Selenastrum capricornutum* 485 mg/l, (7 d) 13.8 mg/l; (96 h) for *Skeletonema costatum* 1.2 mg/l, (7 d) 0.64 mg/l; (7 d) for *Navicula pelliculosa* 42, *Anabaena flos-aquae* 15 mg/l.

Other aquatic spp.: LC₅₀ (96 h) for mysid shrimp (*Mysidopsis bahia*) >1000, grass shrimp 281, fiddler crab 934 mg/l. EC₅₀ (96 h) for sea urchin >1000 mg/l; (14 d) for *Lemna gibba* 25.5 mg/l. EC₅₀ (48 h) for *Litoria moorei* tadpole 111 mg/l.

Bees: LD₅₀ (contact and oral) >100 µg/bee.

SECTION 13 Disposal Considerations

Do not contaminate water, food, or feed by disposal. Empty containers should be triple rinsed into the spray tank during operation. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incinerating, or if allowed, by burning. If burned, stay out of smoke.

SECTION 14 Transport Information

Not hazardous under the applicable DOT, ICAO/IATA, IMO, TDG and local regulations.

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SECTION 15 Other Information

The information contained in the Material Safety Data Sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for with other materials or in processes other than those specifically described herein.

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