



# Material Safety Data Sheet

According to EC Regulation 1907/2006

Print date: 31-Jul-2012

Revision Number: 1

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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### Identification of the substance or preparation

MSDS Ref. No.: 50012  
Product name: ProShield

### Use of the Substance/Preparation

Recommended use: Herbicide.

### Company/Undertaking Identification

• Everris International BV  
Nijverheidsweg 1-5; 6422 PD Heerlen (NL)  
Tel: ++31 (0) 45-5609100; Fax: ++31 (0) 45-5609190

Emergency telephone number: ++44 (0) 1865 407333 (24h)

Email: INFO-MSDS@EVERRIS.com

## 2. HAZARDS IDENTIFICATION

### Classification

#### Indication of danger:

To avoid risks to man and the environment, comply with the instructions for use.

N



#### Most important hazards

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### S -phrase(s)

S35 - This material and its container must be disposed of in a safe way.

S57 - Use appropriate container to avoid environmental contamination.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Chemical nature of the preparation

Ingredients	CAS-No	Weight %	EC-No.	Classification
Glyphosate (in the form of isopropylamine salt)	38641-94-0	> 25%	NE	N;R51/53
Diflufenican	83164-33-4	1 - 5%	616-032-00-9	R52/53
Propylene glycol	57-55-6	1 - 5%	200-338-0	NE
Diatomaceous earth	61790-53-2	1 - 5%		NE
Alcohols, C11-14-iso-, C13-rich	68526-86-3	< 1%		N;R50

NE = Non-Established

**For the full text of the R phrases mentioned in this Section, see Section 16**

### 4. FIRST AID MEASURES

<b>General advice:</b>	In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Move out of dangerous area.
<b>Ingestion:</b>	Do not induce vomiting. Rinse mouth, ingest activated charcoal. Obtain medical attention.
<b>Inhalation:</b>	Move person to fresh air. If symptoms persist, call a physician.
<b>Skin contact:</b>	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. If eye irritation persists, consult a specialist.
<b>Notes to physician:</b>	Treat symptomatically. No specific antidote known. Symptoms: Nausea, vomiting, diarrhoea, salivation. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate.. If large amounts are ingested, the following symptoms may occur; abnormally decreased blood volume (hypovolaemia), acidosis, liver disorders, kidney disorders.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media:

Water spray, carbon dioxide, dry chemical, chemical foam.

#### Unsuitable extinguishing media:

High volume water jet

#### Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases:

Danger of toxic gases in smoke in case of fire

#### Special protective equipment for firefighters:

In the event of fire, wear self-contained breathing apparatus.

**Specific methods:**

In the event of fire, cool tanks with water spray. Prevent the spread of the fire-fighting media. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth..

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Keep people away from and leeward of spill/leak. Use personal protective equipment.

**Environmental precautions:**

Do not contaminate water. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060).

**Methods for cleaning up:**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

**Handling:****Technical measures/precautions:**

Ensure adequate ventilation.

**Safe handling advice:**

Handle in accordance with good industrial hygiene and safety practice.

**Storage:****Technical measures/storage conditions:**

Store in original container. Keep away from direct sunlight. Keep in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs.

**Incompatible products:**

No information available

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures to reduce exposure:**

Ensure adequate ventilation.

**Occupational exposure controls****Personal protective equipment****Respiratory protection:**

No personal respiratory protective equipment normally required.

**Hand protection:**

Nitrile rubber.

**Eye/face protection**

Safety glasses with side shields or goggles.

**Skin and body protection:**

Wear standard coverall and type 6 suit.

**Hygiene measures**

When using, do not eat, drink or smoke. Wash hands and exposed skin after use / handling. Remove and wash contaminated clothing before re-use.

**Exposure limit values**

*Propylene glycol*

Australia TWA	10 mg/m <sup>3</sup> TWA 150 ppm TWA 474 mg/m <sup>3</sup> TWA
Norway - 8 h:	25 ppm TWA 79 mg/m <sup>3</sup> TWA
UK EH40 WEL:	10 mg/m <sup>3</sup> TWA 150 ppm TWA 474 mg/m <sup>3</sup> TWA

*Diatomaceous earth*

Australia TWA	10 mg/m <sup>3</sup> TWA
Belgium - 8 Hr VLE	10 mg/m <sup>3</sup> TWA 3 mg/m <sup>3</sup> TWA
Finland - Occupational Exposure Limits - 8 hour	5 mg/m <sup>3</sup> TWA
Germany TRGS900:	4 mg/m <sup>3</sup> TWA
Germany (DFG) - MAK	4 mg/m <sup>3</sup> MAK
Norway - 8 h:	1.5 mg/m <sup>3</sup> TWA
Spain - Valores Limite Ambientales - VLE	10 mg/m <sup>3</sup> VLA-ED 3 mg/m <sup>3</sup> VLA-ED
UK EH40 WEL:	1.2mg/m <sup>3</sup> (natural respirable dust)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**General Information**

<b>Physical State:</b>	Liquid
<b>Appearance:</b>	Suspension
<b>Color:</b>	White
<b>Odor:</b>	Slight

**Important Health Safety and Environmental Information**

<b>Boiling point/range:</b>	Not applicable
<b>Melting point/range:</b>	Not applicable
<b>Density:</b>	Approximately 1.17g/cm <sup>3</sup> at 20°C
<b>Solubility:</b>	Miscible
<b>Vapour pressure</b>	Not applicable
<b>Vapour density</b>	Not applicable
<b>Explosive properties:</b>	Doesn't present explosion hazard
<b>Flammability (solid, gas):</b>	Non-flammable

**Other information**

<b>pH:</b>	No information available
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## 10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Extremes of temperature and direct sunlight.
<b>Hazardous decomposition products</b>	No decomposition if stored normally
<b>Hazardous reactions</b>	None reasonably foreseeable

## 11. TOXICOLOGICAL INFORMATION

### Component information

*Glyphosate (in the form of isopropylamine salt)*

**LD50/oral/rat =** >5,000mg/kg body weight (limit test)

**LD50/dermal/rabbit =** >5,000mg/kg body weight (limit test)

*Diflufenican*

**LD50/oral/rat =** > 2000 mg/kg

**LD50/dermal/rat =** > 2000 mg/kg

**LC50/inhalation/4h/rat =** > 2,34 mg/l

### Product information

#### Local effects

**Skin effects:** Mild skin irritation.

**Eye effects:** May cause eye irritation with susceptible persons

**Inhalation:** No information available.

**Ingestion:** No information available.

**Sensitization:** No sensitization.

## 12. ECOLOGICAL INFORMATION

### Product information

**Aquatic toxicity:** Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**Ecotoxicity** No ecological information is known on the product

**Persistence and degradability** No persistent or cumulative effects were observed

**Bioaccumulative potential** Does not bioaccumulate

**Mobility in soil** No information available

### Component information

*Glyphosate (in the form of isopropylamine salt)*

#### **Ecotoxicity effects**

EC50/48h/daphnia = 930mg/l (static)

LC50/96h/rainbow trout = >1,000mg/l (static)

EC50/72h/algae = 72.9mg/l

*Diflufenican*

**Ecotoxicity effects**

EC50/48h/daphnia = >0.24mg/l  
 LC50/96h/Fish (C.carpio) = >0.0985mg/l  
 EC50/72h/algae = 0.00025mg/l

Toxicity to aquatic plants EC50 (Scenedesmus subspicatus) 0.015 mg/l

Exposure time: 72 h

Test conducted with a similar formulation.

Toxicity to aquatic plants EC50 (Lemna minor) > 100 mg/l

Exposure time: 7 d

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods:** Do not contaminate ponds, waterways or ditches with chemical or used container. Do not empty into drains. This material and its container must be disposed of as hazardous waste. . Dispose of in accordance with local regulations and national regulations.

**Contaminated packaging:** Do not re-use container for any other purpose and dispose of safely.

### 14. TRANSPORT INFORMATION

**Product information**

**Physical State:** Liquid

**ADR/RID**

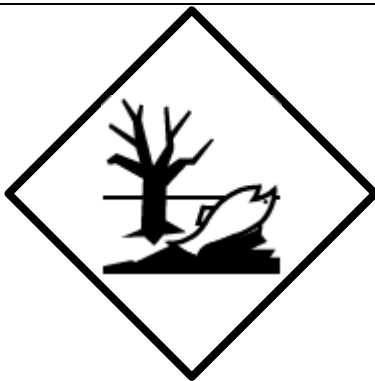
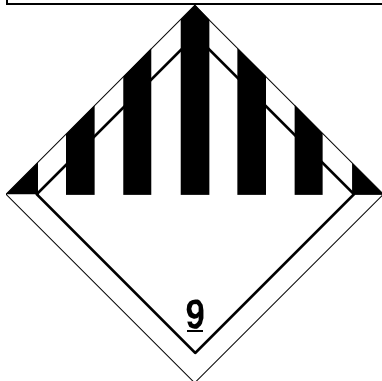
**UN-No:** 3082  
**Proper shipping name:** Environmentally Hazardous Substance Liquid  
 N.O.S.(Diflufenican solution)  
**Hazard Class:** 9  
**Packing group:** III  
**ADR - Tunnel Restriction Codes** E

**IATA**

**UN-No:** 3082  
**Proper shipping name:** Environmentally Hazardous Substance Liquid  
 N.O.S.(Diflufenican solution)  
**Hazard Class:** 9  
**Packing group:** III

**IMO / IMDG**

**UN-No:** 3082  
**Proper shipping name:** Environmentally Hazardous Substance Liquid  
 N.O.S.(Diflufenican solution)  
**Hazard Class:** 9  
**Packing group:** III  
**EmS:** F-A , S-F

**14. TRANSPORT INFORMATION****15. REGULATORY INFORMATION****Indication of danger:**

To avoid risks to man and the environment, comply with the instructions for use.

**In accordance with local and national regulations**

**Registration number UK/Eire:** MAPP 14767  
**GefStoffV (DE):** Not applicable

**16. OTHER INFORMATION****Text of R Phrases mentioned in Section 3**

R50 - Very toxic to aquatic organisms.

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Reason for revision:** \*\*\* Indicates changes since the last revision. This version replaces all previous versions

**Revision date:** 31-Jul-2012

**Prepared by:** Regulatory Affairs Department.

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**End of Safety Data Sheet**