

**INGOT**

Version 2
Revision Date 14.08.2003

GB
102000001679

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

Product information

Trade name : INGOT
 Product code : AE F016410 45 SC45 A1
 Product code : 31165A
 Specification : 12505
 Usage : herbicide
 Company : Bayer CropScience Limited
 Hauxton
 Cambridge
 Cambridgeshire CB2 5HU
 United Kingdom
 Telephone : +44(0)1223 870312
 Telefax : +44(0)1223 872142
 Emergency telephone number : 0800-220876 (UK only)
 +44(0)1223-870312

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Suspension concentrate (=flowable concentrate)(SC), contains:
 Isoproturon/Diflufenican/Flurtamone 400:27:67 g/l SC

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-pharse(s)	Concentration [%]
Isoproturon	34123-59-6	Xn, N	R22 R40 R50/53	36.70
Flurtamone	96525-23-4	N	R50/53	6.20
Diflufenican	83164-33-4		R52/53	2.50
1,2 Propanediol	57-55-6			> 1.00 - < 5.00

3. HAZARDS IDENTIFICATION

Risk advice to man and the environment

||| Possible risks of irreversible effects.
||| Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**INGOT**

Version 2
Revision Date 14.08.2003

GB
102000001679

4. FIRST AID MEASURES

- Skin contact : Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water.
- Eye contact : Immediately flush eye(s) with plenty of water. If eye irritation persists, consult a specialist.
- Ingestion : **Do not induce vomiting. Rinse mouth thoroughly with water. Give small amounts of water to drink. Keep at rest. Obtain medical attention.**

Notes to physician

- Symptoms : **Local: To date no symptoms are known.**
- Symptoms : **Systemic: If large amounts are ingested, the following symptoms may occur: cyanosis, methaemoglobinemia, headache, dizziness**
- Risks : **Danger of formation of methaemoglobin. More severe effects if alcohol is consumed.**
- Treatment : **Local treatment:
Elementary aid, decontamination and symptomatic treatment.**
- Treatment : **Systemic treatment:
In the event of a mouthful or more being ingested, the following measures should be considered:
Monitoring of: cardiac, kidney and red blood cell count.
Observe specific parameters: methaemoglobinaemia and serum potassium.
ECG - monitoring (Electrocardiogram)
If ingested, irrigate the stomach using activated charcoal in addition.
If methaemoglobin level is less than 20%, administer 100% oxygen. If methaemoglobin level is greater than 20% treat with 100% oxygen and slowly give 1% Methylene Blue/Toluidine Blue solution intravenously, 1-2 mg/kg body weight.
Contraindications: alcohol
Oxygen, if needed.**

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : water spray
foam
carbon dioxide (CO₂)
dry powder
- Specific hazards during fire fighting : The product itself does not burn.
In the event of fire the following can be released:
carbon monoxide (CO)
hydrogen fluoride
nitrogen oxides (NO_x)

**INGOT**

Version 2
Revision Date 14.08.2003

GB
102000001679

phosphorus oxides (eg phosphorus pentoxide)

- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Wear full protective suit.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Use personal protective equipment. Evacuate personnel to safe areas.
- Environmental precautions : Keep people and animals away. Do not discharge into the drains/surface water/groundwater. If spillage enters drains leading to sewage works inform local water company immediately. 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.
- Additional advice : Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

7. HANDLING AND STORAGE**Handling**

- Advice on safe handling : Provide exhaust ventilation.
- Advice on protection against fire and explosion : The product neither sensitive to impacts nor to rub effects and therefore not explosive.

Storage

- Further information on storage conditions : The storage temperature should lie between 0 °C and 30 °C, maximum up to 50 °C. Keep away from direct sunlight. Protect against frost. Freezing makes the product unusable.
- Advice on common storage : Keep away from food, drink and animal feedingstuffs.
- Storage period : 24 Months

**INGOT**

Version 2
Revision Date 14.08.2003

GB
102000001679

Storage temperature : 20 - 30 °C
Other data : Stable under normal conditions.
Suitable materials : High density polyethylene

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to COSHH assessment (Control of substances Hazardous to Health Regulations 1999 as amended). Engineering controls should be used in preference to personal protective equipment wherever practicable.

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
1,2 Propanediol	57-55-6	10 mg/m ³ (TWA)	2001	EH40 OES
		474 mg/m ³ (TWA)	2001	EH40 OES

Engineering measures

See chapter 7; no measures exceeding those mentioned are necessary.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
Hand protection : Chemical resistant gloves
PVC gloves
nitrile gloves
Eye protection : Chemical resistant goggles must be worn.
Skin and body protection : Light protective clothing, PVC
PVC boots

Hygiene measures : **When using, do not eat, drink or smoke.
Wash hands before breaks and at the end of workday.**

Protective measures : Avoid contact with skin and eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form : liquid
Colour : colourless, opaque

Safety data

pH : **6 - 8**
Note: **Determined as a 1% suspension in distilled water.**

**INGOT**Version 2
Revision Date 14.08.2003GB
102000001679

Flash point	: Note: none
Autoignition temperature	: 450 °C at 1,024 hPa
Density	: 1.089 g/l at 20 °C
Water solubility	: Note: dispersible
Viscosity, dynamic	: 57 mPa.s at 23 °C
Surface tension	: 29 mN/m at 20 °C
Impact Sensitivity	: Not impact-sensitive 10 kg at 0.4 m
Explosivity	: Note: Not explosive

10. STABILITY AND REACTIVITY

Hazardous reactions : Note: Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50 (rat) > 2,000 mg/kg
Acute dermal toxicity	: LD50 (rat) > 2,000 mg/kg
Skin irritation	: rabbit Result: non-irritant
Eye irritation	: rabbit Result: non-irritant
Sensitization	: guinea pig Result: non-sensitizing

Assessment carcinogenicity : A possible carcinogenic effect at high doses in animal studies on the active substance isoproturon is indicated.

Further information : The toxicological data refer to a similar formulation.

12. ECOLOGICAL INFORMATION**Ecotoxicity effects**Toxicity to fish : LC50: 7 mg/l
Rainbow trout (*Oncorhynchus mykiss*)
Exposure time: 96 h
Test substance: The value mentioned relates to the active ingredient flurtamone.

**INGOT**

Version 2
Revision Date 14.08.2003

GB
102000001679

Toxicity to daphnia : EC50: 32 mg/l
Water flea (Daphnia magna)
Exposure time: 48 h

Toxicity to algae : EC50: 0.053 mg/l
Scenedesmus subspicatus
Exposure time: 72 h

13. DISPOSAL CONSIDERATIONS

Product : In accordance with current regulations may be taken to waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority
Can be landfilled or incinerated, when in compliance with local regulations.
Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

Contaminated packaging : Packaging that cannot be cleaned should be disposed of as product waste.
Empty containers can be landfilled after cleaning, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

Waste key for the unused product : 020108 agrochemical waste containing dangerous substances

14. TRANSPORT INFORMATION

ADR/RID/ADNR	: UN-No	3082
	Labels	9
	Packaging group	III
	Hazard no.	90
	Description of the goods	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ISOPROTURON SOLUTION)
IMDG	: UN-No	3082
	Class	9
	Packaging group	III
	EmS	NONE
	Marine pollutant	P
	Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ISOPROTURON SOLUTION)
IATA	: UN-No	3082
	Class	9
	Packaging group	III
	Description of the goods	Environmentally hazardous substance, liquid, n.o.s.

**INGOT**

Version 2
Revision Date 14.08.2003

GB
102000001679

(ISOPROTURON SOLUTION)

CDG CPL :	UN-No	3082
	Class	9
	Packaging group	III
	Hazard identification number	90
	Emergency action code	2X
	Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ISOPROTURON)

15. REGULATORY INFORMATION

This product has been classified in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002: CHIP 3.

Hazardous components which must be listed on the label:

- Isoproturon
- Flurtamone
- Diflufenican

Symbol(s):	: Xn N	Harmful Dangerous for the environment
R-phrase(s)	: R40 R50/53	Possible risks of irreversible effects. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S35 S36/37 S57	This material and its container must be disposed of in a safe way. Wear suitable protective clothing and gloves. Use appropriate containment to avoid environmental contamination.
Exceptional labelling of special preparations	: Restricted to professional users. To avoid risks to man and the environment, comply with the instructions for use.	

Further information	: WHO-classification: II (Moderately hazardous)
---------------------	---

16. OTHER INFORMATION**Further information**

Text of R phrases mentioned in Section 2:

R22	Harmful if swallowed.
R40	Possible risks of irreversible effects.



INGOT

Version 2
Revision Date 14.08.2003

GB
102000001679

- | | |
|--------|--|
| R50/53 | Very 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. |

The above information is intended to give general health and safety guidance on the storage and transport of the product.

It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with.

The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given.

The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate.

No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

Changes since the last version will be highlighted in the margin. This version replaces all previous versions.