

INSTRATA

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

Identification of the Substance or Preparation

Tradename INSTRATA
Design Code A14036B

Company Identification

Company Syngenta Crop Protection UK Ltd
CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE
Phone (01223) 883400
Fax (01223) 882195
Website www.syngenta-crop.co.uk
Emergency Phone +44 (0) 1484 538444 (24h)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characteristic

Formulation type Suspo-emulsion
Use Fungicide
Active ingredient(s) Chlorothalonil 362 g/l
Fludioxonil 56.9 g/l
Propiconazole 14.5 g/l

Chemical Name	CAS-No.	EC-No.	Symbol(s)	R-phrases(s)	Concentration
chlorothalonil	1897-45-6	217-588-1	T+, N	R26 R37 R40 R41 R43 R50/53	29.9 % W/W
fludioxonil	131341-86-1		N	R50/53	1.2 % W/W
propiconazole	60207-90-1	262-104-4	Xn, N	R22 R43 R50/53	4.7 % W/W
poly(oxy-1,2-ethanediyl), alpha-[tris(1-phenylethyl)phenyl]-omega-hydroxy-	99734-09-5			R52/53	1 - 5 % W/W
Soprophor	90093-37-1		Xi	R36	1 - 5 % W/W
1,2-propanediol	57-55-6	200-338-0			0 - 1 % W/W

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

3. HAZARDS IDENTIFICATION

Contains propiconazole - May cause an allergic reaction.

Toxic by inhalation.

Irritating to eyes.

Limited evidence of a carcinogenic effect.

May cause sensitization by skin contact.

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

4. FIRST AID MEASURES

General advice:

Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control centre or physician, or going for treatment.

Inhalation :

Remove to fresh air.

If breathing is irregular or stopped, administer artificial respiration.

Keep patient warm and at rest.

Call a physician or Poison Control Centre immediately.

Skin contact:

Take off all contaminated clothing immediately.

Wash off immediately with plenty of water.

If skin irritation persists, call a physician.

Wash contaminated clothing before re-use.

Eye contact :

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses.

Immediate medical attention is required.

Ingestion:

If swallowed, seek medical advice immediately and show this container or label.

Do NOT induce vomiting.

Medical advice:

There is no specific antidote available. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Extinguishing media - small fires

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media - large fires

Alcohol-resistant foam

or

Water spray

Extinguishing media which must not be used for safety reasons:

Do not use a solid water stream as it may scatter and spread fire.

Special Hazards during Fire Fighting:

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).

Exposure to decomposition products may be a hazard to health

Special protective equipment for firefighters: Wear full protective clothing and self-contained breathing apparatus.

Further information : Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Refer to protective measures listed in sections 7 and 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Additional advice : If the product contaminates rivers and lakes or drains inform respective authorities.

7. HANDLING AND STORAGE

HANDLING

Advice on safe handling : No special protective measures against fire required.
Avoid contact with skin and eyes.
When using, do not eat, drink or smoke.
For personal protection see section 8.

STORAGE

Requirements for storage areas and containers: No special storage conditions required.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep out of the reach of children.
Keep away from food, drink and animal feedingstuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	Exposure limit(s)	Value type	Source
Chlorothalonil	0.1 mg/m ³	8 h TWA	SYNGENTA
Propiconazole	10 mg/m ³	8 h TWA	SYNGENTA
Fludioxonil	10 mg/m ³	8 h TWA	SYNGENTA
Propane-1,2-diol	10 mg/m ³ Particulates 150 ppm Total (vapour & 470 mg/m ³ particulates)	8 h TWA	UK HSE

ENGINEERING MEASURES

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

If airborne mists or vapors are generated, use local exhaust ventilation controls.

Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.

Where necessary, seek additional occupational hygiene advice.

PERSONAL PROTECTIVE EQUIPMENT

Protective measures :	The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.
Respiratory protection :	A particulate filter respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.
Hand protection :	Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be changed when breakthrough is suspected. Suitable material: Nitrile rubber
Eye protection :	If eye contact is possible, use tight-fitting chemical safety goggles.
Skin and body protection :	Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.) Wear as appropriate: impervious protective suit

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid
Colour:	grey
Odour:	aromatic
pH:	5.5 at 1 % w/v (25 °C)
Flash-Point:	> 100 °C at 741 – 749 mmHg Pensky-Martens c.c.
Auto-Ignition Temperature:	> 650 °C
Explosive Properties:	not explosive
Oxidising properties:	not oxidizing
Density:	1.20 g/ml at 20 °C
Viscosity, dynamic:	903 mPa.s at 20 °C

10. STABILITY AND REACTIVITY

Hazardous decomposition products:	Combustion or thermal decomposition will evolve toxic and irritant vapours.
Hazardous reactions :	None known.

Hazardous polymerization does not occur.
Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity :	LD50 female Rat, 5,000 mg/kg GHS-Classification: Category 5
Acute inhalation toxicity :	LC50 male Rat, 0.52 - 2.01 mg/l, 4 h GHS-Classification: Category 4
Acute dermal toxicity :	LD50 male and female Rat, > 5,000 mg/kg GHS-Classification: None
Skin irritation :	Rabbit: irritating GHS-Classification: Category 2
Eye irritation :	Rabbit: irritating GHS-Classification: Category 2A
Sensitization :	Buehler Test guinea pig: Sensitizing GHS-Classification: Category 1

Long term toxicity

Did not show mutagenic effects in animal experiments.

Chlorothalonil causes kidney tumours in rats and mice via a non-genotoxic mode of action secondary to target organ toxicity.

Did not show reproductive toxicity effects in animal experiments.

Did not show teratogenic effects in animal experiments.

No adverse effects in humans are expected at levels below the occupational exposure limit and when the product is handled and used according to the label.

This information refers to Chlorothalonil.

12. ECOLOGICAL INFORMATION

ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

Bioaccumulation :	Chlorothalonil has low potential for bioaccumulation. Propiconazole has low to medium potential to bioaccumulate. Fludioxonil does not bioaccumulate.
Stability in water :	Chlorothalonil is not persistent in water. Propiconazole is stable in water. Fludioxonil is stable in water.
Stability in soil :	Chlorothalonil is not persistent in soil. Propiconazole is not persistent in soil. Fludioxonil is not persistent in soil.
Mobility :	Chlorothalonil has low to slight mobility in soil Propiconazole has low to medium mobility in soil. Fludioxonil has low to very high mobility in soil.

ECOTOXICITY EFFECTS

Toxicity to fish :	LC50 Oncorhynchus mykiss (rainbow trout), ca. 0.15 mg/l , 96h Derived from active ingredient(s)
Toxicity to aquatic invertebrates:	EC50 Daphnia magna (Water flea), ca. 0.23 mg/l , 48 h Derived from active ingredient(s)
Toxicity to algae :	ErC50 Pseudokirchneriella subcapitata (green algae), ca. 0.46 mg/l, 72 h Derived from active ingredient(s)

13. DISPOSAL CONSIDERATIONS

Product :	Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.
Contaminated packaging :	Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

14. TRANSPORT INFORMATION

Land transport

ADR/ RID:

UN-No.: 3082
 Class: 9
 Danger Label Number : 9
 Packaging group III
 Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (CHLOROTHALONIL AND FLUDIOXONIL)

Sea transport

IMDG:

UN-No.: 3082
 Class: 9
 Danger Label Number : 9
 Packaging group: III
 Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (CHLOROTHALONIL AND FLUDIOXONIL)

Marine pollutant : Marine pollutant

Air transport

IATA-DGR

UN-No.: 3082
Class: 9
Danger Label Number : 9
Packaging group: III
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(CHLOROTHALONIL AND FLUDIOXONIL)

15. REGULATORY INFORMATION

Labelling according to EC Directives

Hazardous components which must be listed on the label:

- chlorothalonil
- propiconazole

Symbol(s) : T Toxic
N Dangerous for the environment

R-phrases(s) : R23 Toxic by inhalation.
R36 Irritating to eyes.
R40 Limited evidence of a carcinogenic effect.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s) : S 2 Keep out of the reach of children.
S13 Keep away from food, drink and animal feedingstuffs.
S20/21 When using do not eat, drink or smoke.
S23 Do not breathe spray.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28 After contact with skin, wash immediately with plenty of water
S35 This material and its container must be disposed of in a safe way.
S36/37 Wear suitable protective clothing and gloves.
S38 In case of insufficient ventilation wear suitable respiratory equipment.
S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)
S57 Use appropriate container to avoid environmental contamination.

Special labelling of

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

Note: The product is classified and labelled in accordance with Directive 1999/45/EC.

16. OTHER INFORMATION

Always read the label. Use pesticides safely.

Revision date: 25/4/2007

Approval number; MAPP 14154

Further information

Text of R phrases mentioned in Section 2:

R22 Harmful if swallowed.
R26 Very toxic by inhalation.
R36 Irritating to eyes.
R37 Irritating to respiratory system.
R40 Limited evidence of a carcinogenic effect.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.
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 information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Product names are a trademark or registered trademark of a Syngenta Group Company.
