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

Tradename **OLYMPUS**
 Design Code **A14111B**
 AGI Code **27221**

COMPANY / UNDERTAKING IDENTIFICATION

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2. COMPOSITION/INFORMATION ON INGREDIENTS**HAZARDOUS COMPONENTS**

CAS-NO.	EC-NO.	CHEMICAL NAME	CONCENTRATION (% w/w)	HAZARD SYMBOLS	RISK PHRASES (R)
131860-33-8	—	azoxystrobin	6.6	T, N	23, 50/53
1897-45-6	217-588-1	chlorothalonil	32.8	T+, N	26, 37, 40, 41, 43, 50/53
57-55-6	200-338-0	1,2-propanediol	1–5	—	—
—	—	fatty alcohol ethoxylate	1–5	Xn	22, 41
—	—	alcohol alkoxylate	1–5	Xn	22, 41

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

3. HAZARDS IDENTIFICATION

Harmful by inhalation. Irritating to respiratory system. Limited evidence of a carcinogenic effect. Risk of serious damage to eyes. May cause sensitisation 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.

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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: Use 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.

Specific 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 fire-fighters: In the event of fire, wear 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 and collect spillage 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 feeding stuffs.

Other data: Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION**COMPONENTS WITH WORKPLACE CONTROL PARAMETERS**

Components	Exposure limit(s)	Value type	Source
azoxystrobin	2 mg/m ³	8 h TWA	SYNGENTA
chlorothalonil	0.1 mg/m ³	8 h TWA	SYNGENTA
propane-1,2-diol – total (vapour & particulates)	150 ppm 474 mg/m ³	8 h TWA	2002 EH40 OES
propane-1,2-diol – particulates	10 mg/m ³	8 h TWA	2002 EH40 OES

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 vapours 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 PROTECTION EQUIPMENT

When using this product refer to the label for details. In all other cases, use the following 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 and a face shield.

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

Colour:	Light beige to beige
Physical State / Form:	Liquid
Odour:	Sweet
Flash-Point:	> 100 °C at 753 mmHg
Oxidizing Properties:	Not oxidizing

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Explosive Properties:	Not explosive
Density:	1.22 g/ml at 20 °C
pH Value:	4–8 at 1% w/v
Dynamic Viscosity:	87.0–572 mPa.s at 20 °C 65.0–495 mPa.s at 40 °C
Surface Tension:	29.5 mN/m 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

Oral Toxicity, Rat: LD₅₀ 3045 mg/kg (female)

Dermal Toxicity, Rat LD₅₀ > 5050 mg/kg (both genders)

Inhalation Toxicity, Rat: LC₅₀ >1.06mg/l, 4h (both genders)

Skin Irritation: Rabbit: Slightly irritating.

Eye Irritation: Rabbit: Severely irritating.

Sensitisation: Man: Sensitising. Remarks: Derived from components

Long Term Toxicity: Did not show mutagenic effects in animal experiments. Chlorothalonil causes kidney tumours in rats and mice via a non-gentoxic 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.

This is not considered to be a risk to man when handled and used as directed on the label. This information refers to chlorothalonil.

12. ECOLOGICAL INFORMATION

ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

Bioaccumulation: Azoxystrobin has medium potential for bioaccumulation. Chlorothalonil has low potential for bioaccumulation

Stability in water: Azoxystrobin is stable in water. Chlorothalonil is not persistent in water.

Stability in soil: Azoxystrobin is moderately persistent in soil. Chlorothalonil has low persistence in soil.

Mobility: Azoxystrobin has moderate mobility in soil. Chlorothalonil has low to slight mobility in soil.

ECOTOXICITY EFFECTS

Toxicity to Fish: LC₅₀ *Oncorhynchus mykiss* (rainbow trout), 0.15 mg/l, 96 h

Toxicity to Aquatic Invertebrates: EC₅₀ *Daphnia magna* (water flea), 0.37 mg/l, 48 h

Toxicity to Algae: EBC₅₀ *Selenastrum capricornutum* (green algae), 0.11 mg/l, 72 h

Toxicity to Algae: ERC₅₀ *Selenastrum capricornutum* (green algae), 0.69 mg/l, 72 h

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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

RAIL/ROAD/SEA/AIR (RID/ADR/IMDG/ICAO/IATA)	Class	UN no.	Packaging Group
	9	3082	III
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (AZOXYSTROBIN AND CHLOROTHALONIL)		
Marine pollutant:	Yes		

15. REGULATORY INFORMATION

Hazard symbols / Classifications	Xn N	HARMFUL DANGEROUS FOR THE ENVIRONMENT
Risk phrases (R)	20 37 40 41 43 50/53	Harmful by inhalation. Irritating to the respiratory system. Limited evidence of a carcinogenic effect. Risk of serious damage to eyes. May cause sensitisation by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases (S)	2 13 20/21 26 35 36/37/39 57 SP1	Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. This material and its container must be disposed of in a safe way. Wear suitable protective clothing, gloves and eye/face protection Use appropriate containment to avoid environmental contamination. Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.
Special label	To avoid risks to man and the environment, comply with the instructions for use.	

16. OTHER INFORMATION

Always read the label. Use pesticides safely.

DPD compliant. Based upon SDS dated 28/03/2006, version 2.

Significant changes made to sections 2, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13.

Product registration number: MAPP 13797.

Text of R phrases mentioned in Section 2:

R22 Harmful if swallowed.

R23 Toxic by inhalation.

R26 Very toxic by inhalation.

R37 Irritating to respiratory system.

R40 Limited evidence of a carcinogenic effect.

R41 Risk of serious damage to eyes.

R43 May cause sensitization by skin contact.

R50/53 Very toxic 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.