

Safety Data Sheet

Revision date: 04 August 2008
replaces all previous editions

BONZI

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

Identification of the Substance or Preparation

Tradename	BONZI
Design Code	A10784A
AGI Code	1000187

Company Identification

Company	Syngenta Crop Protection UK Ltd CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE
Phone	(01223) 833400
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characteristic

Formulation type	An aqueous suspension.
Use	A plant growth regulator
EEC-No.	266-325-7 Paclobutrazol

CAS-No.	Hazardous ingredients	Concentration	Hazard symbols	Risk phrases (R)
76738-62-0	Paclobutrazol	4 g/l	Xn, N	20/22, 36, 51/53
57-55-6	Propane-1,2-diol	150 g/l	-	-

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

3. HAZARDS IDENTIFICATION

Unlikely to be hazardous.

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.

Skin contact: Take off immediately all contaminated clothing. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

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.

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 the container, label or this Data Sheet, if possible. 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 technical protective measures required. No special handling advice required. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. For personal protection see section 8.

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 feed.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	Exposure limit(s)	Value type	Source
Paclobutrazol	5 mg/m ³	8 h TWA	SYNGENTA
1,2-propanediol	10 mg/m ³ 150 ppm 470 mg/m ³	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 dust is 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

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: No personal respiratory protective equipment normally required. A particulate filter respirator may be necessary until effective technical measures are installed.

Hand protection: Chemical resistant gloves are not usually required. Select gloves based on the physical job requirements.

Eye protection: Eye protection is not usually required. Follow any site specific eye protection policies.

Skin and body protection: No special protective equipment required. Select skin and body protection based on the physical job requirements.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	suspension.
Colour:	Green.
Boiling point:	100 °C
Flash point:	>102 °C at 101.6 kPa Pensky-Martens c.c.
Autoignition temperature	>650 °C
Oxidising properties	Not oxidising
Explosive properties	Not explosive
Density at 20 °C:	1.02 g/cm ³
Miscibility	Miscible.

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 rat: > 5346 mg/kg.

Acute Dermal Toxicity

LD50 rat: > 2000 mg/kg

Skin Irritation

Rabbit : Non-Irritating

Eye Irritation

Rabbit : Non-Irritating

Sensitisation

Guinea pig : Not a skin sensitiser in animal tests

Long Term Toxicity

Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

12. ECOLOGICAL INFORMATION

ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

Bioaccumulation: Paclobutrazol bioaccumulates

Stability in water: Paclobutrazol is persistent in water.

Stability in soil: Degradation half life: 250 d
Paclobutrazol is persistent in soil

Mobility: Paclobutrazol has medium mobility in soil.

Ecotoxicity

Toxicity to fish: LC50 *Oncorhynchus mykiss* (rainbow trout), >100mg/l, 96 h

Toxicity to aquatic invertebrates: EC50 *Daphnia magna* (Water flea), > 100 mg/l , 48 h

Toxicity to algae : ErC50 *Lemna gibba* (duckweed), > 100 mg/l, 7 d

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

Not Classified as Dangerous for Transport.

15. REGULATORY INFORMATION

Hazard symbol / Classification:	-	None
Risk phrases (R):	-	None
Safety phrases (S):	2	Keep out of the reach of children.
	13	Keep away from food, drink and animal feeding stuffs.
	20/21	When using do not eat, drink or smoke.
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.
Based upon SDS Version 7, release date 11/04/08.

Approval number: MAPP 13623.

Text of R phrases mentioned in Section 2:
R20/22 Harmful by inhalation and if swallowed.
R36 Irritating to eyes.
R51/53 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.