MATERIAL SAFETY DATA SHEET

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Revision Date: 01/11/2008 Approval Date: 06/26/2007

TRANSPORTATION EMERGENCY (24 hours a day)

Paczol® Ornamental Growth Regulator

EPA Registration Number: 400-515-59807

I. PRODUCT AND COMPANY IDENTIFICATION

Product name	PACZOL®
Chemical name	Paclobutrazol
Use of substance/preparation	Plant Growth Regulator

II HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW CAUTION!

MAY BE HARMFUL IF ABSORBED THROUGH SKIN. NORMAL PRECAUTIONS COMMON TO SAFE MANU-

FACTURING PRACTICE SHOULD BE FOLLOWED IN HANDLING AND STORAGE.

III. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT CAS#	% BY WEIGHT
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Paclobutrazol 76738-62-0 0.4

Ingredients not precisely identified are non-hazardous and/or proprietary.

IV. FIRST AID MEASURES

- Swallowing: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
- Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
- **Eye contact**: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lens, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

V. FIRE-FIGHTING MEASURES > 93.3 °C Flammable limits Lower limit Not available Upper limit Not available Autoignition temperature: Not available NFPA CLASSIFICATION Health Flammability Reactivity Special provisions 1 1 0 Hazardous combustion products Burning can produce the following combustion products Oxides of nitrogen. Oxides of carbon. Ammonia. Halogens and halogen oxides. Special fire fighting procedures: Do not discharge extinguishing waters into streams, rivers and lakes. **Special protective** equipment for firefighters :: Body covering protective clothing, full "turn-out" gear. Self-contained breathing apparatus. Extinguishing media Suitable: Large fires alcohol-type foam or universal-type foams Small fires CO2 Dry chemical Unsuitable: Water jets

VI. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear suitable protective equipment. Avoid contact with eyes and skin.

Environmental precautions ...: Prevent from entering sewer system, surface water or soil.

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Methods for cleaning up

Observe government regulations.

Small spills:: Absorb on inert material such as sand, earth, vermiculite.

Collect for disposal.

Large spills Dike to contain spill. Pump excess material into suitable container (metal drums, metal tank, or such).

VII. HANDLING AND STORAGE

HANDLING

Handling precautions: Do not get in eyes., Avoid prolonged or repeated contact with skin. Avoid breathing vapor. Use with adequate ventilation. Wash thoroughly after handling.

Other precautions

NOTE TO END-USERS: The employee protection recommendations on this MSDS may differ from those on the product label. For normal use of this product, always refer to the personal protective equipment requirements on the product label.

STORAGE

Storage requirements: Store in a cool, dry place.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

PERSONAL PROTECTION

Respiratory protection . .: In case of insufficient ventilation, wear suitable respiratory equipment., The determination of appropriate respiratory protection is best performed,on a case by case basis, taking into consideration the exposure conditions of the particular operation., The respirator manufacturer should be consulted to ensure that the air-purifying cartridges utilized will provide adequate protection for the exposure conditions and period of wear concerned.

Hand protection /

Protective gloves	Chemical resistant protective gloves
Eye protection	Safety glasses with side shields.
Skin protection: such as long sleeves to	
Other protective equipment	Eye bath, Safety shower

ENGINEERING CONTROLS

Ventilation: General (mechanical) room ventilation is expected to be satisfactory., Special, local ventilation is needed at points where vapors can be expected to escape to the workplace air.

IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Physical state	Liquid
Color	Greyish
Odor	Musty
Odor threshold	Not available

OTHER PROPERTIES

Boiling point	> 100 °C; 212 °F	
Melting point	165 - 166 °C	
рН	7.9; (5 % H2O)	
Density		
vapor pressure	1.05 g/cm3	
Solubility in water	Dispersible	
Solubility in		
organic solvents	No data available.	
Partitioning coefficient	Not available	
Flash point	> 199 °F; > 93.3 °C	
Method: Setaflash closed cup ASTM D 3828		
Autoignition temperature	Not available	
Upper explosion limits	Not available	
Lower explosion limits	Not available	

X. STABILITY AND REACTIVITY

Stability: This product is stable under normal storage and handling conditions.

Incompatible materials: Oxidizing agents.

Hazardous combustion products:

Burning can produce the following

combustion products . . .: Oxides of nitrogen. Oxides of carbon. Ammonia Halogens and halogen oxides.

XI. TOXICOLOGICAL INFORMATION

SWALLOWING

Test results Acute toxicity: LD50 Rat Result: 5,346 g/kg

SKIN ABSORPTION

Test results Acute toxicity: LD50 - Rat Result: > 2,000 mg/kg

INHALATION

Test results Acute toxicity: LD50 - Rat Result: 369 mg/l Exposure time: 4 h

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SKIN CONTACT

Test results Skin irritation: Species: Rabbit Result: Not irritating

EYE CONTACT

Test results Eye irritation: Species: Rabbit Result: No irritation

SENSITIZATION

Test results Species: Guinea pigs Result: Negative

XV. REGULATORY INFORMATION

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (RQ's) in 40CFR302.4.

Components present in this product at a level which could require reporting under the statute are:

**** NONE ****

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

**** NONE ****

Massachusetts Right-To-Know Substance List (MSL)--Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are:

**** NONE ****

Pennsylvania Right-To-Know Hazardous Substance List-Hazardous Substances and Special Hazardous Substances on the list must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are:

**** NONE ****

New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical nameCAS#New Jersey TS NumberPaclobutrazol76738-62-0

EPA Hazard Categories

(SARA 311, 312) Immediate Health Hazard

California Proposition 65

XII. ECOLOGICAL INFORMATION

This product is not tested.

The following information is based on analogy with a similar material:

Component ecotoxicology

Paclobutrazol

Acute toxicity fish: LC50 - Bluegill (Lepomis macrochirus) Result: 23.6 mg/l Exposure time: 96 h

Component ecotoxicology

Paclobutrazol

Acute toxicity to aquatic invertebrates: EC50 - Water flea (Daphnia magna) Result: 33.2 mg/l Exposure time: 48 h

XIII. DISPOSAL CONSIDERATIONS

General: Dispose of in accordance with appropriate Federal, State, and local regulations., Avoid discharge to sewers and natural waters.

XIV. TRANSPORT INFORMATION

DOT Classification	This product is not regulated by DOT.
IMDG Classification	This product is not regulated by DOT.
ICAO Classification	This product is not regulated by DOT.

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XVI. OTHER INFORMATION

RECOMMENDED USES AND RESTRICTIONS: NOTE TO END-USERS: This MSDS is being provided to all interested persons in accordance with federal and state right-to-know laws. Precautionary Statements, First Aid Statements and Directions for Use of this product by end-users are contained on the product label and must be followed at all times.

HMIS RATING

Health	n Flammability	Reactivity	PPI	
1	1	0	Х	
STP			mperature and	
		pressure		
W/W		Weight/Weight		
0 (HMIS)				
1 (HMIS)		: Slight hazar	d	
2 (HMIS)		Moderate hazard		
3 (HMIS)		Serious hazard		
4 (HMIS)		: Severe haza	Severe hazard	
X (HMIS)		: Personal pro	otection rating	
to be supplied by user depending on use conditions				

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OHP 986191 01/08