

Promalin® Plant Growth Regulator

MSDS# BIO-0062 Rev. 3

ISSUED 04/06/07

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: Promalin® Plant Growth Regulator
EPA Registration No. 73049-41
Code Number: 16435
List Number: 2572

MANUFACTURER: Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, Illinois 60048

EMERGENCY TELEPHONE NUMBERS

Emergency Health or Spill:

Outside the United States: 651-632-6184

Within the United States: 877-315-9819

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME: 6-Benzyladenine

CONCENTRATION: 1.80 %

CAS NUMBER: 1214-39-7

OSHA-PEL 8HR TWA: N/L

STEL: N/L

CEILING: N/L

ACGIH-TLV 8HR TWA: N/L

STEL: N/L

CEILING: N/L

OTHER 8HR TWA: N/A

LIMITS STEL: N/A

CEILING: N/A

INGREDIENT NAME: Gibberellin A4 and Gibberellin A7

CONCENTRATION: 1.80 %

CAS NUMBER: 468-44-0 and 510-75-8

OSHA-PEL 8HR TWA: N/L

STEL: N/L

CEILING: N/L

ACGIH-TLV 8HR TWA: N/L

STEL: N/L

CEILING: N/L

OTHER 8HR TWA: N/A

LIMITS STEL: N/A

CEILING: N/A

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2. COMPOSITION/INFORMATION ON INGREDIENTS, continued

INGREDIENT NAME: Inert Ingredients - identity withheld as a Trade
Secret
CONCENTRATION: 96.40 %
CAS NUMBER: N/A
OSHA-PEL 8HR TWA: N/L
STEL: N/L
CEILING: N/L
ACGIH-TLV 8HR TWA: N/L
STEL: N/L
CEILING: N/L
OTHER 8HR TWA: 50 ppm total vapor and aerosol, 10 mg/m3 aerosol for
LIMITS a major component (AIHA WEEL)
STEL: N/A
CEILING: N/A

3. HAZARDS INFORMATION

EMERGENCY OVERVIEW: Product is non-toxic by ingestion, skin contact, or
inhalation. Direct contact with eyes or skin may cause mild irritation.

ROUTE(S) OF ENTRY: Skin: No
Inhalation: No
Ingestion: No

SKIN CONTACT: Non-irritant

SKIN SENSITIZATION: Non-sensitizer

EYE CONTACT: Non-irritant

TARGET ORGANS: N/D

CARCINOGENICITY RATING: NTP: N/L IARC: N/L OSHA: N/L ACGIH: N/L
None

SIGNS AND SYMPTOMS: Direct contact with eyes or skin may cause mild
irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Kidney disorders (carrier
solvent).

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4. FIRST AID MEASURES

EYES: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

SKIN: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INGESTION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INHALATION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

5. FIRE FIGHTING PROCEDURES

FLASH POINT: 226° F (108° C)

FLASH POINT METHOD: Pensky-Martens Closed Cup

LOWER EXPLOSIVE LIMIT(%): 2.6%

UPPER EXPLOSIVE LIMIT(%): 12.5%

AUTOIGNITION TEMPERATURE: 741° F (394° C)

FIRE & EXPLOSION HAZARDS: Non-flammable and no explosive properties. Will support combustion.

EXTINGUISHING MEDIA: Use appropriate medium for underlying cause of fire.

FIRE FIGHTING INSTRUCTIONS: Wear protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE PROCEDURES: Recover product and place in appropriate container for disposal. Ventilate and wash area.

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7. HANDLING AND STORAGE

HANDLING: N/D.

STORAGE: Store below 75° F (24° C). Keep containers tightly closed when not in use.

SPECIAL PRECAUTIONS: Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust.

RESPIRATORY PROTECTION: Not usually required. If necessary, use air purifying respirator with dust-mist/organic vapor cartridge combination.

SKIN PROTECTION: Wear impervious gloves (e.g. nitrile rubber, or neoprene) to prevent contact. Wear protective clothing, as necessary to minimize contact.

EYE PROTECTION: Not usually required. If necessary, use safety glasses or goggles.

OTHER PROTECTION: Wash thoroughly with soap and water after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Colorless, clear liquid

ODOR: Odorless

BOILING POINT: N/D

MELTING/FREEZING POINT: N/D

VAPOR PRESSURE (mm Hg): N/D

VAPOR DENSITY (Air=1): > 2

EVAPORATION RATE: N/D

BULK DENSITY: 8.67 lb/gal

SPECIFIC GRAVITY: 1.045 @ 25° C

SOLUBILITY: Miscible in water

pH: 3.25 (10% solution in water @ 20-25° C)

VISCOSITY: 58.0 cP @ 25° C

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10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under ordinary conditions of use and storage.

INCOMPATIBILITIES: Oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: N/D.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

ORAL LD50: > 5,050 mg/kg (rat) EPA Category IV.

DERMAL LD50: > 5,050 mg/kg (rabbit) EPA Category IV.

INHALATION LC50: No lethality observed in rats after a 4 hour exposure to an aerosol concentration of 6.6 mg/L. EPA Category IV.

CORROSIVENESS: No corrosive properties.

DERMAL IRRITATION: Produced slight redness in dermal irritation test in rabbits. Not classified as a skin irritant. EPA Category IV.

OCULAR IRRITATION: Minimally irritating in an eye irritation test in rabbits. EPA Category III.

DERMAL SENSITIZATION: Did not produce any positive reactions in skin sensitization assay (maximization test) in guinea pigs.

SPECIAL TARGET ORGAN EFFECTS: Ingestion of sizable amounts (over 100 ml) may cause some gastrointestinal upset and temporary central nervous system depression due to the carrier solvent. Effects appear more severe in individuals with kidney problems. Lactic acidosis, stupor and seizures have been reported following chronic ingestion of the carrier.

CARCINOGENICITY INFORMATION: None of the components are listed as carcinogens.

Promalin® Plant Growth Regulator

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12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/D

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Dispose of product in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

DOT STATUS: Not Regulated
PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
UN NUMBER: N/A
PACKING GROUP: N/A
REPORTABLE QUANTITY: N/A

IATA/ICAO STATUS: Not Regulated
PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
UN NUMBER: N/A
PACKING GROUP: N/A
REPORTABLE QUANTITY: N/A

IMO STATUS: Not Regulated
PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
UN NUMBER: N/A
PACKING GROUP: N/A
REPORTABLE QUANTITY: N/A
FLASH POINT: 225° F

15. REGULATORY INFORMATION

TSCA STATUS: EXEMPT RCRA STATUS: N/D
CERCLA STATUS: N/D PROP 65 (CA): N/D
SARA STATUS: N/D

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16. OTHER INFORMATION

REASON FOR ISSUE: Review & Updated Hazard Information (Section 3),
Phys/Chem Information (Section 9) and Toxicological
Information (Section 11). No substantive changes.

APPROVAL DATE: 04/06/07

SUPERSEDES DATE: 10/29/03

LEGEND: N/A = Not Applicable

N/D = Not Determined

N/L = Not Listed

L = Listed

C = Ceiling

S = Short-term

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