

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:

Arysta LifeScience NA Corp.
15401 Weston Pkwy, Ste. 150
Cary, NC 27513

EMERGENCY TELEPHONE NUMBERS:

FOR 24 HOUR EMERGENCY MEDICAL ASSISTANCE CALL:
1-866-303-6952

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure,
or accident call CHEMTREC 1-800-424-9300

PRODUCT NAME : Ponnax® plant regulator
CHEMICAL NAME : N,N-dimethylpiperidinium Chloride
CHEMICAL FAMILY : Quaternary ammonium salt
PRODUCT CODE : EPA Reg. No. 66330-347

SECTION 2 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER	OSHA PEL	ACIGH TLV
Mepiquat Chloride	23.6	24307-26-4	Not listed	Not listed
Inerts	76.4	NA	Not listed	Not listed

SECTION 3 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

EMERGENCY OVERVIEW: Blue liquid with no appreciable odor.

- Caution
- Harmful if swallowed or absorbed through the skin.
- Causes eye irritation.
- If contact with eyes or skin immediately flush with plenty of water.
- Avoid contact with eyes, skin or clothing.
- Keep out of reach of children.

POTENTIAL HEALTH HAZARDS:

EYE - Irritating to the eyes. Degree of injury will depend on the amount of material that gets into eye and the speed and thoroughness of the first aid treatment.

SKIN - May cause skin irritation.

INHALATION - Spray mists may be harmful if inhaled.

INGESTATION - Harmful if swallowed.

POTENTIAL PHYSICAL HAZARDS: None known.

ENVIRONMENTAL HAZARDS: None known.

SECTION 4 - FIRST AID MEASURES

IF SWALLOWED: Drink 1 to 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call physician or the Poison Control Center.

IF IN EYES: In case of contact, immediately flush with plenty of water. Get medical attention if irritation persists.

IF INHALED: Remove from contaminated area. Observe victim closely. If irritation develops, get medical attention.

IF ON SKIN: Remove contaminated clothing. Wash with soap and water. Call a physician if irritation develops.

NOTE TO PHYSICIAN: Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT (method): Will not flash.

FLAMMABLE LIMITS (LFL-UFL): Not applicable.

FIRE AND EXPLOSION HAZARD: None.

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam or dry chemical extinguishing systems recommended to prevent environmental damage due to water run off.

FIREFIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece. Full firefighting turn-out gear (Bunker gear).

HAZARDOUS COMBUSTION PRODUCTS: Hydrogen chloride, Oxides of nitrogen and hydrogen.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary personnel from entering.

SMALL SPILL: Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate chemical waste for disposal. Rinse area with water and place rinsate in chemical waste container for disposal.

LARGE SPILL: Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow any absorbed material to solidify, and scrape up for disposal. After removal, flush contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Use only in a well-ventilated area. Do not reuse this container.

STORAGE: Keep container closed when not in use. Keep away from food, feed and drinking water. Store in a well ventilated, dry place away from heat. Keep from freezing.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 HOUR TWA): (Refer to Section 3)

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION - Safety glasses.

CLOTHING - Long-sleeved shirt and long pants. Shoes plus socks.

GLOVES - Waterproof gloves.

RESPIRATOR - When handling in enclosed areas where exposure limits may be exceeded, use a dust/mist filtering respirator (MSHA/NIOSH number prefix TC-21C).

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Blue liquid.

ODOR: No appreciable odor

MOLECULAR WEIGHT (technical): 149.7

MOLECULAR FORMULA (technical): C₇H₁₆ClN
BOILING POINT: 212 °F
FREEZING POINT: 30 °F
SPECIFIC GRAVITY: 1.02 g/ml (8.5 lb/gal)
pH: 7.0 - 9.0
VAPOR PRESSURE: Unknown
% VOLATILE: Unknown
WATER SOLUBILITY: Completely soluble.

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable, however may decompose if heated.
CONDITIONS TO AVOID: Temperatures above 125°F (50°C) and below 30°F (0°C).
INCOMPATIBILITY WITH OTHER MATERIALS: None known.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, oxides of hydrogen and nitrogen.
HAZARDOUS POLYMERIZATION: Product will not undergo polymerization.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD ₅₀ (rat)	-	3,300 mg/Kg
Dermal LD ₅₀ (rat)	-	> 2,000 mg/Kg
Inhalation LC ₅₀ , 4 hr (rat)	-	> 5.64 mg/L
Eye Irritation (rabbit)	-	Moderate
Skin Irritation (rabbit)	-	Slight
Sensitization (guinea pig)	-	Non-sensitizer

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CARCINOGEN STATUS:

OSHA - Not listed.
NTP - Not listed.
IARC - Not listed.

MUTAGENIC DATA: No evidence of effects during *in vivo* or *in vitro* studies.

ADDITIONAL DATA: Not known to exhibit reproductive or teratogenic (birth defect) effects.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: Do not apply directly to water, to areas where surface water is present. Do not contaminate water when disposing of rinsate or equipment washwater. Do not contaminate water by cleaning of equipment

FISH TOXICITY: (Technical)

96 hour LC₅₀, Rainbow trout - 730 mg/L
96 hour LC₅₀, Bluegill - unknown
48 hour LC₅₀, Daphnia magna - 50 mg/L

AVIAN TOXICITY: (Technical)

Oral LD₅₀, Bobwhite quail - unknown
Oral LD₅₀, Mallard duck - unknown

BEE TOXICITY: Non toxic.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE: Pesticide wastes are toxic. Dispose of in accordance with applicable Federal, state and local laws and regulations.

CONTAINER: Refer to product label.

SECTION 14 - TRANSPORT INFORMATION

DOT SHIPPING DESCRIPTION: Plant Growth Regulator, Inhibitor or Modifier, Liquid, N.O.I.B.N.

DOT HAZARD CLASS: Non-hazardous

UN NUMBER: N/A
DOT PACKING GROUP: N/A
DOT PRIMARY/SECONDARY LABEL: None
DOT PRIMARY/SECONDARY PLACARD: None
DOT EMERGENCY RESPONSE GUIDE #: N/A

SECTION 15 - REGULATORY INFORMATION

FIFRA: All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

OSHA HAZARD COMMUNICATION STANDARD STATUS: Non-Hazardous

CERCLA REPORTABLE QUANTITY: None

SARA TITLE III STATUS:

302 Extremely Hazardous Substance	-	No
311/312 Hazard Categories	-	None
313 Toxic Chemicals	-	No

CALIFORNIA PROP 65 STATUS: Not listed.

SECTION 16 - OTHER INFORMATION

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Arysta LifeScience North America (ALSNA) Corporation's knowledge. ALSNA makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. To the extent permitted by law, we disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

REVISED DATE: March 12, 2007
REVISED FOR: Add new Company name, address, registration number and
Emergency telephone numbers
REVISED BY: A. Brown
APPROVED BY: S. Seckinger