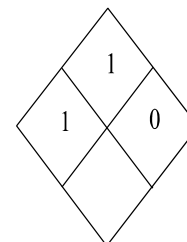


MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION



PRODUCT NAME: AMCOTONE™; GREENTON™
GENERAL USE: Thinning Apples and Pears (Plant growth regulator)
PRODUCT DESCRIPTION: Pink to red flowable powder
EPA Registration Number: 5481-473
MSDS No.: 239_9
Current Revision Date: 20 October, 2008

MANUFACTURER:
AMVAC CHEMICAL CORPORATION
4100 E. Washington Blvd.
Los Angeles, CA 90023-4406
Ph: 323-264-3910
FAX: 323-268-1028

EMERGENCY TELEPHONE NUMBERS:
MANUFACTURER: 323-264-3910
TRANSPORTATION (24 HOURS)
CHEMTREC: 800-424-9300
OTHER (24 HOURS)
AMVAC: 323-264-3910

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	WT %	CAS No.
1-Naphthaleneacetic acid	0.45 %	86-87-3
1-Naphthaleneacetamide	1.20 %	86-86-2
Other Ingredients	98.35%	N/A

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

COMPONENT	HAZARD	OSHA PEL*	ACGIH TLV*
Nuisance dust	Respiration hazard		3 mg/m ³

* Exposure Limits 8 hrs. TWA (mg/m³)

AMCOTONE and GREENTON are trademarks of AMVAC Chemical Corporation.

3. **HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW:

CAUTION! Irritating to respiratory tract. Avoid contact with eyes. Keep Out of Reach Of Children!

Do not contaminate water when disposing of equipment washwaters. Do not apply directly to water or areas that are regularly under water.

POTENTIAL HEALTH EFFECTS

ROUTE(S) OF ENTRY: Inhalation, eye and skin contact, ingestion.

SIGNS OF ACUTE OVEREXPOSURE: No significant adverse effects are anticipated, based on available information.

SIGNS OF CHRONIC OVEREXPOSURE: No significant adverse effects are anticipated, based on available information.

CARCINOGENICITY: No evidence of carcinogenicity in laboratory animals tested with either 1-NAD (1-Naphthaleneacetamide) or 1-NAA.Na (1-Naphthaleneacetactic acid sodium salt), a structurally related compound.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin irritation may be aggravated in persons with existing skin lesions. Breathing of dust may aggravate acute and chronic asthma and other chronic pulmonary diseases.

4. **FIRST AID MEASURES**

EYES: Immediately flush the eyes with copious amounts of clear, cool running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyes and lids with water. Contact a physician immediately if there is any sign of irritation or other problems.

INHALATION: Remove victim to fresh air. If breathing has ceased, clear the victim's airway and start mouth-to-mouth artificial respiration. If breathing is difficult, give oxygen. Contact a physician immediately if the victim requires any first aid other than removal to fresh air.

4. FIRST AID MEASURES, cont'd

INGESTION: Immediately dilute the swallowed product by giving large quantities of water or milk. Induce vomiting by giving Syrup of Ipecac according to the directions on the bottle or by touching the back of the tongue with a finger. Never give anything by mouth to an unconscious person. Contact a physician immediately.

SKIN: Immediately flush all affected areas with large amounts of clear water for at least 15 minutes. Remove contaminated clothing. Do not attempt to neutralize with chemical agents. Wash clothing before reuse. If skin irritation persists, contact a physician.

NOTE TO PHYSICIANS: No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred. For more information contact AMVAC Chemical Corporation or call your local or national Poison Control Center.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash Point:	Not applicable
Autoignition Temperature:	Not determined
Flammable Limits:	
Lower flammable limit:	Not applicable
Upper flammable limit:	Not applicable

EXPLOSIVITY

Mechanical Impact:	Not explosive
Static Discharge:	May occur in the presence of a dust cloud. Care should be taken to minimize creation of dust clouds.

HAZARDOUS COMBUSTION PRODUCTS: Combustion products may include carbon oxides, nitrogen oxides and other unknown vapors and fumes.

EXTINGUISHING MEDIA: Water spray, dry chemical, alcohol foam, or carbon dioxide.

FIRE FIGHTING INSTRUCTIONS: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Evacuate people who are downwind of fire. Wash all protective clothing before reuse.

6. ACCIDENTAL RELEASE MEASURES

GENERAL: Wear all personal protective equipment (See Section 8). Don't breathe dusts. Take care not to raise a dust cloud during cleanup. Keep spectators upwind from spill.

6. ACCIDENTAL RELEASE MEASURES, cont'd

SMALL or LARGE SPILL: Carefully scoop up or vacuum the spilled product into containers for reuse or disposal as a hazardous waste. Clean residual solids by scrubbing with soap and water. Cleanup materials should also be taken up as hazardous waste.

7. HANDLING AND STORAGE

HANDLING: Prevent inhalation of dust by working with adequate ventilation. Prevent contact by wearing appropriate Personal Protective Equipment (PPE, Section 8 below). Wash thoroughly after handling.

STORAGE: Store in the original container in a cool, dry, ventilated area. Protect against physical damage. Keep separate from fertilizers, seeds, insecticides or fungicides. Keep away from children and pets.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: A system of local and/or general exhaust is recommended to keep exposures to dusts below the recommended TLV's.

RESPIRATORY PROTECTION: A MSHA/NIOSH-approved respirator fitted with organic vapor cartridges and dust covers or approved dust masks are required if the dust cannot be controlled below the TLV by engineering controls.

SKIN PROTECTION: The following personal protective equipment (PPE) is required for use with this product - long-sleeved shirt and long pants, waterproof gloves and shoes plus socks.

EYE PROTECTION: Safety glasses are required whenever a person is working with hazardous chemicals. Goggles should be worn when there is a chance of dust being generated. An eyewash bath should be available in case of dust exposure to the eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
APPEARANCE:	Pink to red powder
ODOR:	Essentially odorless
ODOR THRESHOLD:	None established
BOILING POINT:	Not applicable
FREEZING/MELTING POINT:	Not applicable
BULK DENSITY:	39.5 - 48.3 lb/ft ³
VAPOR PRESSURE (mm/Hg):	Not applicable
PERCENT VOLATILE BY VOLUME:	Not applicable

9. **PHYSICAL AND CHEMICAL PROPERTIES, cont'd**

SOLUBILITY IN WATER:	Disperses
SOLUBILITY (Other):	Active ingredients are soluble in alcohol, ethers, low molecular weight ketones, and esters.
PARTITION COEFFICIENT (O/W):	Not available
pH:	Not available
EVAPORATION RATE:	Not applicable

10. **STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable under normal use and storage conditions.

INCOMPATIBILITY: Avoid strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Burning may cause the formation of carbon oxides, nitrogen oxides and unknown fumes and vapors.

HAZARDOUS POLYMERIZATION: This product will not polymerize.

11. **TOXICOLOGICAL INFORMATION**

GENERAL: No information is available for this product, with the exception of the eye irritation study. The following information on the active ingredients can be used to make informed decisions regarding the toxicity of this product.

ACTIVE INGREDIENT	1-NAA	1-NAD
INGESTION:	Oral LD ₅₀ (rat): 2520 mg/kg	>5050 mg/kg
INHALATION:	Inhalation LC ₅₀ (rat): > 0.45 mg/L	>2.17 mg/L
DERMAL:	Skin LD ₅₀ (rabbit): > 2000 mg/kg	>2020 mg/kg
IRRITATION:	Eye irritation (rabbit): Amcotone is not an eye irritant	
	Skin irritation (rabbit): Non irritating	Non irritating
SENSITIZATION:	Skin sensitization: Not a sensitizer	Not a sensitizer
	(guinea pig)	
TERATOGENICITY:	Tests carried out on Technical 1-Naphthaleneacetic Acid showed no effects on developmental toxicity.	
MUTAGENICITY:	Tests carried out on Technical 1-Naphthaleneacetamide showed no evidence of genotoxic potential, <i>in vivo</i> .	
CARCINOGENICITY:	No evidence of carcinogenicity in laboratory animals tested with either 1-NAD (1-Naphthaleneacetamide) or 1-NAA.Na (1-Naphthaleneacetactic acid sodium salt), a structurally related compound.	
REPRODUCTIVE TOXICITY:	A study carried out on Technical 1-Naphthaleneacetic acid, Sodium Salt, has shown no effects on reproductive toxicity. At the highest dose level tested there was some evidence of parental toxicity with accompanying associated effects on offspring survival and growth.	
TOXICOLOGICALLY SYNERGISTIC PRODUCTS:	No data is available.	

12. ECOLOGICAL INFORMATION

GENERAL: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed on site by use according to the label or at an approved waste disposal facility. Do not reuse the empty container. Check with the appropriate Federal, State and local authorities to determine the current regulations for your area.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Contact your local regulatory authorities for guidance on current regulations in your area.

14. TRANSPORTATION INFORMATION

DOT CLASS:	Not regulated
UN NUMBER:	Not regulated
IMDG CLASS (sea):	Not regulated
IATA CLASS (air):	Not regulated
MARINE POLLUTANT:	No
PACKING GROUP:	Not regulated
HAZARD LABEL(s):	None
ADR CLASS (road):	Not regulated
PROPER SHIPPING NAME(s):	Not regulated
REPORTABLE QUANTITY:	None

PACKAGING

GENERAL DESCRIPTION: 70 kg Drums; 500 g jars

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: This product is registered under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

15. REGULATORY INFORMATION, cont'd

SARA TITLE III DATA

Section 311 & 312 Hazard Categories:

Immediate Health Hazard:	Yes
Delayed Health Hazard:	Yes
Fire Hazard:	Yes
Reactive Hazard:	No
Sudden Pressure Release Hazard:	No

Section 302 Extremely Hazardous Substances: None

Section 313 Toxic Chemicals: None

CERCLA Reportable Quantities (RQ): None

STATE REGULATIONS:

CALIFORNIA (Proposition 65): None

16. OTHER INFORMATION

MSDS STATUS:

Date This Revision: 20 October, 2008

Date Previous Revision: 13 September, 2005

Person Responsible for Preparation: Gary A. Braden

REASONS FOR REVISION: Annual Review. Changes were made in section 14 to update the typical packaging information.

DISCLAIMER:

This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

ABBREVIATIONS:

ACGIH	-	American Conference of Governmental Industrial Hygienists
CERCLA	-	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	-	Department of Transportation
EPA	-	Environmental Protection Agency
FIFRA	-	Federal Insecticide, Fungicide, and Rodenticide Act
IARC	-	International Agency for Research on Cancer
IATA	-	International Air Transport Association
IMDG	-	International Maritime Dangerous Goods
NTP	-	National Toxicology Program
OSHA	-	Occupational Safety and Health Agency
SARA	-	Superfund Amendments and Reauthorization Act
TSCA	-	Toxic Substances Control Act

This is the last page of this MSDS. There should be 7 pages.