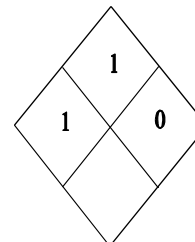


## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION



**PRODUCT NAME:** AMID-THIN® W  
**GENERAL USE:** Thinning Apples and Pears  
**PRODUCT DESCRIPTION:** White to tan flowable powder  
**EPA Registration Number:** 5481-426  
**Health Canada Registration Number:** PCP # 13167  
**MSDS No.:** 216\_10  
**Current Revision Date:** 24 January, 2006

**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-Naphthaleneacetamide (NAD)	8.40 %	86-86-2
Inert Ingredients (contains crystalline silica as quartz)	91.6% (8.83%)	N/A (14808-60-7)

#### OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

COMPONENT	HAZARD	OSHA PEL*	ACGIH TLV*
Crystalline silica	Respiration hazard	0.1 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>

\* Exposure Limits 8 hrs. TWA

Amid-Thin is a registered Trademark 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:** Dusts may be irritating to the respiratory tract and cause coughing, wheezing, and expectoration. May cause eye irritation, seen as redness and tearing.

**SIGNS OF CHRONIC OVEREXPOSURE:** Chronic inhalation exposure to crystalline silica may cause pulmonary fibrosis (silicosis).

**OTHER POTENTIAL EFFECTS:** This product contains clay. A naturally occurring component of clay is crystalline silica (e.g. quartz is one form of crystalline silica). Inhalation of crystalline silica may cause pulmonary fibrosis (silicosis). The IARC has classified crystalline silica as a probable human carcinogen (Group 2A).

**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 will be a delay getting to medical help, rinse the eyes an additional 15 minutes.

**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.

#### **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 your local Poison Control Center.

---

#### **5. FIRE FIGHTING MEASURES**

##### **FLAMMABLE PROPERTIES**

Flash Point: Not applicable

Autoignition Temperature: Not applicable

Flammable Limits:

Lower flammable limit: Not applicable

Upper flammable limit: Not applicable

##### **EXPLOSIVITY**

Mechanical Impact: Not explosive

Static Discharge: Will not occur

**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 face piece 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 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.

**LARGE SPILL:** Same as for a small spill.

---

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 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**

<b>Physical State:</b>	Solid
<b>Appearance:</b>	White to tan powder
<b>Odor:</b>	Musty odor
<b>Odor Threshold:</b>	Not available
<b>Boiling Point:</b>	Not applicable
<b>Freezing/Melting Point:</b>	Not applicable

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

<b>Bulk Density:</b>	15.50 lb/ft <sup>3</sup>
<b>Vapor Pressure (mm/Hg):</b>	Not applicable
<b>Vapor Density:</b>	Not applicable
<b>Percent Volatile by Vol:</b>	Not applicable
<b>Solubility in Water:</b>	Disperses
<b>Solubility (other):</b>	Active ingredient is soluble in acetone, acetonitrile, and alcohols
<b>Partition coefficient (O/W):</b>	Not available
<b>pH:</b>	Neutral as saturated solution
<b>Reactivity with Water:</b>	None
<b>Evaporation Rate:</b>	Not applicable

---

10. **STABILITY AND REACTIVITY**

**CHEMICAL STABILITY (Conditions to avoid):** Stable under normal use and storage conditions.

**INCOMPATIBILITY:** Avoid strong oxidizing agents.

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

**HAZARDOUS POLYMERIZATION:** This product will not polymerize.

---

11. **TOXICOLOGICAL INFORMATION**

<b>INGESTION:</b>	Oral LD <sub>50</sub> (rat):	> 10000 mg/kg
<b>INHALATION:</b>	Inhalation LC <sub>50</sub> (rat):	> 147 mg/L
<b>DERMAL:</b>	Skin LD <sub>50</sub> (rabbit):	> 5000 mg/kg
<b>IRRITATION:</b>	Eye irritation (rabbit):	Not an irritant
	Skin irritation (rabbit):	No data available on this product. A test on Technical 1-Naphthaleneacetamide has shown no skin irritation.
<b>SENSITIZATION:</b>	Skin sensitization: (guinea pig)	No data available on this product. A test on Technical 1-Naphthaleneacetamide has shown no skin sensitization.

**TERATOGENICITY:** No data are available on this product. Tests carried out on Technical 1-Naphthaleneacetic Acid, sodium salt, have shown some developmental effects on the fetus, but only at maternally toxic dose levels, in both the rat and rabbit.

**MUTAGENICITY:** There is no evidence of genotoxic potential for the technical 1-Naphthaleneacetamide, *in vivo*.

11. **TOXICOLOGICAL INFORMATION, cont'd**

**CARCINOGENICITY:** This product contains clay. A naturally occurring component of clay is crystalline silica (e.g. quartz is one form of crystalline silica). Inhalation of crystalline silica may cause pulmonary fibrosis (silicosis). The IARC has classified crystalline silica as a probable human carcinogen (Group 2A). There is no indication of a carcinogenic concern from the rodent bioassays that have been carried out on both NAD and NAA.Na materials.

**REPRODUCTIVE TOXICITY:** No data are available on this product. 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 information 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**

**PESTICIDE 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. Check with the appropriate Federal, State and local authorities to determine the current regulations for your area.

**CONTAINER DISPOSAL:** Do not reuse the empty container. Check with the appropriate Federal, State and local authorities to determine the current regulations for your area.

---

14. **TRANSPORTATION INFORMATION**

<b>DOT Class:</b>	Not regulated
<b>UN Number:</b>	Not regulated
<b>IMDG Class (sea):</b>	Not regulated
<b>IATA Class (air):</b>	Not regulated
<b>Marine Pollutant:</b>	No
<b>Packing Group:</b>	Not regulated
<b>Hazard Label(s):</b>	None
<b>ADR Class (road):</b>	Not regulated
<b>Proper Shipping Name(s):</b>	Not regulated
<b>Reportable Quantity:</b>	None

**14. TRANSPORTATION INFORMATION, cont'd**

**PACKAGING**

**General Description:** 12 x 1 lb and 24 x 1/4 lb containers in cardboard boxes; plastic-lined fibreboard drums containing 50-200 lbs; 70 kg drums

---

**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.

**CANADIAN REGULATIONS:** This product is registered under the Pest Control Product Act of Canada (PCPA). It is a violation of Canadian Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions.  
This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**EUROPEAN UNION REGULATIONS:** This product is not registered in the European Union.

**SARA TITLE III DATA**

**Section 311 & 312 Hazard Categories:**

Immediate Health Hazard:	Yes
Delayed Health Hazard:	Yes
Fire Hazard:	No
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):** This product may contain respirable crystalline silica, known to the State of California to cause cancer.

---

**16. OTHER INFORMATION**

**MSDS Status:**

**Date This Revision:** 24 January, 2006

**Date Previous Revision:** 26 March 2004

**Person Responsible for Preparation:** Gary A. Braden

**16. OTHER INFORMATION, cont'd**

**Reasons for Revision:** Changes were made in sections 2 and 11 to update toxicological knowledge of this product. Changes were made in sections 14 and 15 to correct typographical errors.

**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
EPA	-	Environmental Protection Agency
FIFRA	-	Federal Insecticide, Fungicide, and Rodenticide Act
IARC	-	International Agency for Research on Cancer
NTP	-	National Toxicology Program
OSHA	-	Occupational Safety and Health Agency
SARA	-	Superfund Amendments and Reauthorization Act
TSCA	-	Toxic Substances Control Act
DOT	-	Department of Transportation
IMDG	-	International Maritime Dangerous Goods
IATA	-	International Air Transport Association

---

This is the last page of this MSDS. There should be 8 pages.