MATERIAL SAFETY DATA SHEET

**INTERNATIONAL WATER BASE ADHESIVE**

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Material Identity**
Product Name: INTERNATIONAL WATER BASE ADHESIVE
Product Name and Code: Pliobond 5035, 584451

**Company**
Ashland Chemical Co.
P.O. Box 2219
Columbus, OH 43216
614-790-3333

**Emergency Telephone Number:**
1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:
1-800-325-3751

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients (s) | CAS Number | % (by weight) |
|---|---|---|
| WATER | 7732-18-5 | 42.0 – 46.0 |
| VINYL POLYMER | Trade Secret | 17.0 – 21.0 |
| VINYL ACETATE COPOLYMER | Trade Secret | 13.0 – 17.0 |
| ROSIN ESTER | Trade Secret | 9.0 – 13.0 |
| GLYCEROL ROSINATE | | 9.0 – 13.0 |
| VINYL ACETATE | 108-05-4 | 0.1 |

## 3. HAZARDS IDENTIFICATION

**Potential Health Effects**

**Eye**

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

**Skin**

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Additional symptoms of skin contact may include: skin, blistering, allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects), Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

**Swallowing**

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

**Inhalation**

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

**Symptoms of Exposure**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea),

irritation (nose, throat, airways), lung irritation, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), difficult breathing, lung edema (fluid buildup in the lung tissue).

**Target Organ Effects**

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver affects blood abnormalities, respiratory tract damage (nose, throat, and airways).

**Developmental information**

This material (or component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

**Cancer Information**

Vinyl acetate caused an increase in cancer of the nasal cavity in rates. The relevance of this finding to humans is uncertain. The International Agency for Research on Cancer reclassified this chemical from Group 3 (not able to be classified) to Group 2B (possibly carcinogenic in humans) in 1995. This classification is based on the study in rats, along with knowledge that vinyl acetate is changed to acetaldehyde, a known animal carcinogen, in the body.

**Other Health Effects**

No data

**Primary Route (s) of Entry**

Inhalations, skin absorption, skin contact, eye contact, ingestion.

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## 4. FIRST AID MEASURES

**Eyes**

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for a least 15 minutes while holding eyelids apart; seek immediate medical attention.

**Skin**

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse. Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

**Swallowing**

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**Inhalation**

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Note to Physicians**

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract, skin, lung (for example, asthma-like conditions), blood-forming system.

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## 5. FIRE FIGHTING MEASURES

**Flash Point**

> 200.0 F (93.3 C) SETA

**Explosive Limit**

(for component) Lower 2.6 Upper 13.4 %

**Autoignition Temperature**

No data

**Hazardous Products of Combustion**

May form: aldehydes, carbon dioxide and carbon monoxide, phenols, various hydrocarbons.

**Fire and Explosion Hazards**

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. While not normally combustible, if water content is lost (as in a fire), material may release flammable vapors if exposed to high temperature. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air, may travel long distances along the ground before igniting/flashing back to vapor source.

**Extinguishing Media**

Alcohol foam, water fog, carbon dioxide, dry chemical.

**Fire Fighting Instructions**

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

**NFPA Rating**

Health – 2, Flammability – 1, Reactivity - 0

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## 6. ACCIDENTAL RELEASE MEASURES

**Small Spill**

Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood..

**Large Spill**

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

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## 7. HANDLING AND STORAGE

**Handling**

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash before reuse. Shower after work using plenty of soap and water.

**Storage**

Keep from freezing.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Eye Protection**

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representatives.

**Skin Protection**

Wear resistant gloves such as : natural rubber, neoprene, to prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**Respiratory Protections**

If workplace exposure limit (s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

**Engineering Controls**

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

**Exposure Guidelines**

Component
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WATER (7732-18-5)
No exposure limits established

VINYL POLYMER
No exposure limits established

VINYL ACETATE COPOLYMER
No exposure limits established

ROSIN ESTER
No exposure limits established

GLYCEROL ROSINATE
No exposure limits established

VINYL ACETATE (108-05-4)
OSHA VPEL 10.000 ppm – TWA
OSHA VPEL 20.000 ppm – STEL
ACGIH TLV 10.000 ppm – TWA
ACGIH TLV 15.000 ppm - STEL

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Point**

(for component) 162.0 – 163.4 F (72.2 – 73.0 C)

**Vapor Pressure**

(for component) 100.000 mmHg

**Specific Vapor Density**

No data

**Specific Gravity**
1.030 @ 77.00 F

**Liquid Density**
8.610 lbs/gal @ 77.00 F
1.030 kg/1 @ 25.00 C

**Percent Volatiles**
No data

**Evaporation Rate**
No data

**Appearance**
MILKY

**State**
LIQUID

**Physical Form**
No data

**Color**
WHITE

**Odor**
No data

**PH**
4.5

**Viscosity**
7000.0 - 12000.0 cps @ rvt #5 @ 10 rpm

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## 10. STABILITY AND REACTIVITY

**Hazardous Polymerization**
Product will not undergo hazardous polymerization.

**Hazardous Decomposition**
May form: aldehydes, carbon dioxide and carbon monoxide, phenols, various hydrocarbons.

**Chemical Stability**
Stable.

**Incompatibility**
Avoid contact with: strong alkalis, strong mineral acids.

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## 11. TOXICOLOGICAL INFORMATION

**Mutagenicity**
This material (or a component) caused mutations in cells in culture and in laboratory animals. The relevance of this finding to human health is uncertain.

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## 12. ECOLOGICAL INFORMATION

No data

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## 13. DISPOSAL CONSIDERATION

**Waste Management Information**

Destroy by liquid incineration in accordance with applicable regulations. For assistance with your waste management needs – including disposal, recycling and waste stream reduction, contact Ashland Distribution Company, IC&S Environmental Services Group at 800-637-7922.

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## 14. TRANSPORT INFORMATION

**DOT information – 49 CFR 172.101**

**DOT Description:**

NON-REGULATED BY D.O.T.

**Container/Mode:**

55 GAL DRUM.TRUCK PACKAGE

**NOS Component:**

None

**RQ (Reportable Quantity) – 49 CFR 172.101**

Not applicable

**Other Transportation Information**

The Transport Information may vary with the container and mode of shipment.

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## 15. REGULATORY INFORMATION

**US Federal Regulations**

**TSCA (Toxic Substances Control Act) Status**

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

**CERCLA RQ – 40 CFR 302.4 (a)**

| Component | RQ (lbs) |
|---|---|
| VINYL ACETATE | 5000 |

**CERCLA RQ – 40 CFR 302.4 (b)**

Materials without a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

**SARA 302 Components – 40 CFR 355 Appendix A**

| Section 302 Component (s) | TPQ (lbs) | RQ (lbs) |
|---|---|---|
| VINYL ACETATE MONOMER | 1000 | 5000 |

**Section 311/312 Hazard Class – 40 CFR 370.2**

Immediate (X) Delayed(X) Fire( ) Reactive( ) Sudden Release of Pressure( )

**Sara 313 Components – 40 CFR 372.65**

Section 313 Component (s) CAS Number Max %

| | | |
|---|---|---|
| VINYL ACETATE | 108-05-4 | .11 |

**OSHA Process Safety Management 29 CFR 1910**

None Listed

**EPA Accidental Release prevention 40 CFR 68**

| RMP Component (s) | Condition | TQ (lbs) |
|---|---|---|
| VINYL ACETATE MONOMER | | 15000 |

**International Regulations**

**Inventory Status**

DSL (CANADA) the intentional ingredients of this product are listed.

**State and Local Regulations**

**California Proposition 65**

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance (s) known to the state of California to cause cancer.
ACETALDEHYDE
FORMALDEHYDE (GAS)

**New Jersey RTK Label Information**

VINYL ACETATE 108-05-4

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**16. OTHER INFORMATION**

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.