

# MATERIAL SAFETY DATA SHEET

## Ethylene-Vinyl Acetate Copolymer

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

**Manufacturer:** Andrew Pearson Industries  
**Contact address:** 1 Andrew Pearson Drive  
Mount Airy, NC 27030  
Telephone: 336 786 1800  
**Product:** Vinyl acetate film used in glass lamination  
**Intended Use:** Lamination of glass for decorative or functional use.  
**Date Prepared:** May 2010

### SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name	CAS number	Weight %
Ethylene-Vinyl Acetate Copolymer	24937-78-8	~100
Vinyl Acetate	108-05-4	Trace

Trace impurities and additional material names not listed above may also appear in section 15. These materials may be listed for local "Right-To-Know" compliance and for other reasons.

### SECTION 3 HAZARDS IDENTIFICATION

**Product name:** Ethylene-Vinyl Acetate Copolymer  
**Synonyms:** EVA film  
**Chemical abstraction No.:** 24937-78-8 (CAS No.)  
**Hazardous components:** None (percentage of additives ingredient)  
**Mixture:**  
Character: Hazardous components: None  
Concentration/Percentage: N/A

### SECTION 4 FIRST AID MEASURES

**Eye contact:** Check for and remove any contact lenses. Immediately flush eyes with plenty of water for several minutes, occasionally lifting the upper and lower eyelids. Seek medical advice if pain persists.

**Skin contact:** In case of contact with molten material, immediately immerse contacted area in cold water. do not attempt to peel off the molten material from skin. Seek medical attention promptly.

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Inhalation:	Supply fresh air. Seek immediate medical advice
Ingestion:	Very low toxicity. May cause choking if swallowed. Consult a physician when if large amount has been swallowed.
Major symptoms and harm effects:	None.
First aid personal protection:	None.
Notes to physician:	Expatiate symptoms or phenomenon of the patient.

### SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing media:	Water fog, dry chemical, carbon dioxide or foam as appropriate for materials in surrounding fire. Avoid using direct streams of water on molten, burning material as it may scatter and spread the fire.
Special exposure hazards:	Dust may be explosive when mixed with air.
Special extinguishing procedures:	<ol style="list-style-type: none"><li>1. Stand up-wind, then extinguish with appropriate media, covering the entire fire area thoroughly.</li><li>2. If possible, remove remaining material or goods to a safe location.</li><li>3. Appropriate protective fire fighting clothing and respirator are required for fire fighters.</li></ol>
Unusual fire and explosion hazards:	Melts in proximity to fires resulting in slippery floors and stairs. Airborne dusts of this product, in an enclosed space, and in the presence of an ignition source, may constitute an explosion hazard. See NFPA Bulletin 654, <i>Standard for the prevention of fire and dust explosions from the manufacturing, processing and handling of combustible particulate solids</i> , for safe handling procedures.
Personal protection:	None.
Environmental protection:	None.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

In case of spill or other release:	Always wear recommended personal protective equipment. Avoid generating dust. Keep away from heat and flame. Collect material and place in a container for reuse or disposal. If material is molten, allow to cool. Use caution, as material may still be hot after solidification.
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***Spills and releases over pertinent local legal limits may cause pollution; in these instances it is necessary to inform local authorities.***

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### SECTION 7 HANDLING AND STORAGE

**Handling:** Always wear recommended personal protective equipment. Under conditions of storage, vapors may collect in the headspace of the containers causing a sometimes pungent odor during unpacking of these products. Avoid breathing vapors when opening containers. Follow standard personal hygiene and housekeeping practices for an industrial environment.

**Storage:** General room ventilation is adequate for storage and ordinary handling. Use local exhaust at points of fume generation or if dusty conditions prevail to maintain exposure below the PEL/TLV exposure limits.

### SECTION 8 EXPOSURE CONTROLS & PERSONAL PROTECTION

**Engineering control:** Ventilated area to prevent accumulation of dust and fumes.

**Control factor:** TWA/STEL/CEILING/Biotic Index (BEI): ---

**Personal protection equipment:** Respiratory protection: Use dust-proof mask.  
Hand protection: Use rubber gloves.  
Eye protection: Use safety goggles when dust is present.  
Skin & body protection: Long sleeve lab coats and gloves to protect skin exposure.

**Hygiene procedures:** None.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Solid flexible film.	<b>Odor:</b>	None.
<b>Odor threshold:</b>	Not applicable.	<b>PH value:</b>	Not applicable.
<b>Melting point:</b>	60-90° C.	<b>Boiling point/Range:</b>	Not applicable.
<b>Inflammability:</b>	Not applicable.	<b>Flash point:</b>	Not applicable.
<b>Decomposition Temp.:</b>	Not applicable.	<b>Test method:</b>	Open cup, closed cup.
<b>Spontaneous Temp.:</b>	300-350° C.	<b>Exposure limits:</b>	Not applicable.
<b>Vapor pressure:</b>	Not applicable.	<b>Vapor density:</b>	Not applicable.
<b>Density:</b>	0.925 ~ 0.955	<b>Solubility in water:</b>	Insoluble.
<b>Partition coefficient:</b>	---	<b>Volatility Speed:</b>	---
(n-octanol/water, log KOW)			

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### SECTION 13 DISPOSAL CONSIDERATIONS

Waste disposal The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Product removed from the cylinder must be disposed of in accordance with appropriate Federal, State, local regulation. Return cylinders with residual product to the company of manufacture. Do not dispose of locally.

### SECTION 14 TRANSPORTATION INFORMATION

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Additional Information
DOT Classification	UN1301	Vinyl acetate stabilized	3	II	Reportable quantity: 5000 lbs (2270 kg) Limited quantity: yes Packaging instruction: Passenger aircraft limitation 5 L Cargo aircraft limitation 60 L Special provisions: IB2, T4, TP1
TDG Classification	UN1301	Vinyl acetate stabilized	3	II	Explosive limit and limited quantity index 1 Passenger carrying road or rail index 5
Mexico Classification	UN1301	Vinyl acetate stabilized	3	II	Reportable quantity: 5000 lbs (2270 kg) Limited quantity: yes Packaging instruction: Passenger aircraft limitation 5 L Cargo aircraft limitation 60 L Special provisions: IB2, T4, TP1

Refer to CFT 49 (or authority having jurisdiction) to determine the information required for shipment of the product.

### SECTION 16 OTHER INFORMATION

The information presented above is believed to be accurate and reliable to the best of our knowl-

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## SECTION 15 REGULATORY INFORMATION

United States

HCS Classification: Flammable liquid  
Irritating material  
Carcinogen  
Target organ effects

US Federal regulations: **United States inventory (TSCA 8b):** This material is listed or exempted.  
**SARA 302/304/311/312:** extremely hazardous substances: vinyl acetate  
**SARA 302/304 emergency planning and notification:** vinyl acetate  
**SARA 302/304/311/312 hazardous chemicals:** vinyl acetate  
**SARA 311/312 MSDS distribution - chemical inventory - hazardous identification:** vinyl acetate: Fire hazard, reactive, immediate (acute) health hazard, delayed (chronic) health hazard.  
**Clean water act (CWA) 307:** No products were found.  
**Clean water act (CWA) 311:** vinyl acetate  
**Clean air act (CAA) 112 accidental release prevention:** vinyl acetate  
**Clean air act (CAA) 112 regulated flammable substances:** no products found  
**Clean air act (CAA) 112 regulated toxic substances:** vinyl acetate

### SARA 313

	Product name	CAS Number	Concentration
Form R - Reporting requirements:	vinyl acetate	108-05-4	100
Supplier notification:	vinyl acetate	108-05-4	100

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations: **Connecticut Carcinogen Reporting:** This material is not listed.  
**Connecticut Hazardous Material Survey:** This material is not listed.  
**Florida substances:** This material is not listed.  
**Illinois Chemical Safety Act:** This material is not listed.  
**Illinois Toxic Substances Disclosure to Employee Act:** This material is not listed.  
**Louisiana Reporting:** This material is not listed.  
**Louisiana Spill:** This material is not listed.  
**Massachusetts Spill:** This material is not listed.  
**Massachusetts Substances:** This material is not listed.  
**Michigan Critical Material:** This material is not listed.  
**Minnesota Hazardous Substances:** This material is not listed.  
**New Jersey Hazardous Substances:** This material is not listed.  
**New Jersey Spill:** This material is not listed.  
**New Jersey Toxic Catastrophe Prevention Act:** This material is not listed.

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**New York Acutely Hazardous Substances:** This material is not listed.  
**New York Toxic Chemical Release Reporting:** This material is not listed.  
**Pennsylvania RTK Hazardous Substances:** This material is not listed.  
**Rhode Island Hazardous Substances:** This material is not listed.

### Canada

**WHMIS (Canada):** Class B-2: Flammable liquid.  
Class D-1B: Material causing immediate and serious toxic effects (toxic).  
Class D-2A: Material causing other toxic effects (very toxic).  
Class F: Dangerously reactive material.

**CEPA Toxic Substances:** This material is not listed.

**Canadian ARET:** This material is not listed.

**Canadian NRPL:** This material is not listed.

**Alberta Designated Substances:** This material is not listed.

**Ontario Designated Substances:** This material is not listed.

**Quebec Designated Substances:** This material is not listed.

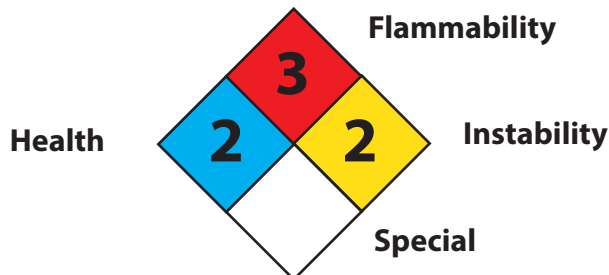
### SECTION 16 OTHER INFORMATION

**Label requirements:** EXTREMELY FLAMMABLE LIQUID AND VAPOR. FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. CAUSES RESPIRATORY TRACT AND EYE IRRITATION. MAY CAUSE SKIN IRRITATION. MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE CANCER HAZARD - MAY CAUSE CANCER, BASED ON ANIMAL DATA.

**Hazardous Material Information System (USA):**

<b>Health</b>	<b>*2</b>
<b>Flammability</b>	<b>3</b>
<b>Physical Hazards</b>	<b>2</b>

**National Fire Protection Association (USA):**



### Notice to reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained in this document.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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### SECTION 10 STABILITY AND REACTIVITY DATA

Stability:	Stable.
Special conditions of hazardous reaction:	None.
Conditions to avoid:	Temperatures above 200° C
Incompatibility:	Might react with strong oxidant.
Hazardous decomposition products:	Carbon monoxide, carbon dioxide and a wide variety of innocuous or toxic fumes.

### SECTION 11 TOXICOLOGY INFORMATION

Exposure:	May cause slight irritation to the respiratory system when inhaling dust or smoke.
Symptom:	None.
Acute toxicity:	None.
Chronic toxicity:	None.

### SECTION 12 ECOLOGICAL INFORMATION

Ecological toxicity:	Difficult to biodegrade. It can be recycled with appropriate technologies.
Sustainable and de-toxic:	Difficult to naturally degrade.
Ecologic accumulation:	None.
Liquidity in soil:	None.
Other poor effects:	Improper burning may generate hazardous gas.

### SECTION 13 DISPOSAL CONSIDERATIONS

Consult local laws and regulations, and safe burning through a waste incinerator is preferred.

### SECTION 14 TRANSPORTATION INFORMATION

United Nations number (UN No):	Not regulated.
United Nations shipping name:	Not regulated.
DOT hazard class:	Not regulated as a hazardous.
Package category:	Not regulated.
Maritime pollutants:	Not regulated.
Special transport way and note:	Not regulated.

### SECTION 15 REGULATORY INFORMATION

Carcinogenicity:	Glass and glass dust is not listed by IARC, NTP or OSHA.
EPCRA, CERCLA, SARA:	Glass and glass dust is not listed as an Extremely Hazardous Sub-

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### SECTION 15 REGULATORY INFORMATION

Ethylene-Vinyl Acetate Copolymer (CAS No. 24937-78-8) is listed in the following chemical inventories:

USA:	TSCA
Canada:	DSL
European EINECS:	Exempt from the listings, all monomers are listed.
Australia:	AICS
Korea:	ECL
Phillipines:	PICCS
China:	Inventory of Existing Chemical Substances

### SECTION 16 OTHER INFORMATION

The information presented above is believed to be accurate and reliable to the best of our knowledge, however Andrew Pearson Industries makes no warranties expressed or implied regarding this information. In addition, since the use of the product is not within the control of Andrew Pearson Industries, it is the user's obligation to determine the conditions of safe use of the product.



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## Ethylene-Vinyl Acetate Copolymer

### SECTION 10 STABILITY AND REACTIVITY DATA

Stability:	Stable
Incompatibility (Materials to avoid):	Highly reactive or incompatible with oxidizing materials, acids, alkalis and moisture.
Hazardous Decomposition Products: hazardous	Under normal conditions of storage and use,  decomposition products should not be produced.
Hazardous Polymerization:	Under normal conditions or storage and use, hazardous polymerization will not occur.
Conditions to Avoid:	None known

### SECTION 11 TOXICOLOGY INFORMATION

Product/Ingredient:	RESULT	Species	Dose	Exposure
Vinyl acetate	LD50 Dermal	Rabbit	2335 mg/kg	--
	LD50 Oral	Rat	2900 mg/kg	--
	LC50 Inhalation	vapor Rat	114000 mg/m <sup>3</sup>	4 hours
	LC50 Inhalation gas	Rat	22800 mg/m <sup>3</sup>	1 hour

### SECTION 12 ECOLOGICAL INFORMATION

No adverse effects recorded or foreseen.

### SECTION 13 DISPOSAL CONSIDERATIONS

Glass and glass dust can be recycled into some new glass products and should be recycled wherever appropriate and possible.

Glass and glass dust is not considered a hazardous waste under USEPA RCRA.

Dispose as an industrial waste per local requirements.

### SECTION 14 TRANSPORTATION INFORMATION

Glass and glass dust is not a hazardous material under USDOT regulations, RQ = NA.

Glass and glass dust is not considered dangerous goods per Canadian DG regulations.

### SECTION 15 REGULATORY INFORMATION

Carcinogenicity:	Glass and glass dust is not listed by IARC, NTP or OSHA.
EPCRA, CERCLA, SARA:	Glass and glass dust is not listed as an Extremely Hazardous Substance

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Chronic effects on humans:	<b>CARCINOGENIC EFFECTS:</b> Classified A3 (proven for animals) by ACHIG, 2b (possible for humans) by IARC.
Other toxic effects on humans:	No specific information is available regarding other toxic effects of this materials on humans.
Specific effects	
Carcinogenic:	May cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.
MUTAGENIC:	No known significant effects or critical hazards.
Reproduction:	No known significant effects or critical hazards.

### SECTION 12 ECOLOGICAL INFORMATION

#### Aquatic ecotoxicity

Vinyl acetate	Acute LC50 26000 ug/L Fresh water	Fish - fathead minnow - Pimephales promelas - 4 days	96 hours
	Acute LC50 24000 to 30510 ug/L Fresh water	Fish - fathead minnow - Pimephales promelas - 4 days	96 hours
	Acute LC50 24000 ug/L Fresh water	Fish - fathead minnow - Pimephales promelas - Adult	96 hours
	Acute LC50 23000 ug/L Fresh water	Fish - fathead minnow - Pimephales promelas - Adult	96 hours
	Acute LC50 20000 ug/L Fresh water	Fish - fathead minnow - Pimephales promelas - Adult	96 hours
	Acute LC50 19730 to 25111 ug/L Fresh water	Fish - fathead minnow - Pimephales promelas 3.8 to 6.4 cm - 1 to 2 g	96 hours
	Acute LC50 18000 ug/L Fresh water	Fish - bluegill Leopomis macrochirus 3.8 - 6.4 cm 1 to 2 g	96 hours
	Acute LC50 215000 ug/L Fresh water	Fish - fathead minnow - Pimephales promelas - 1 day	96 hours
	Acute LC50 10000 ug/L Marine water	Crustaceans common shrimp, sand shrimp Crangon crangon - Larvae	48 hours

Products of degradation: carbon oxides (CO, CO<sub>2</sub>) and water.