

## MATERIAL SAFETY DATA SHEET

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Version 1.5

## Section 1 - Product and Company Information

Product Name 4-ACETOXYSTYRENE, 96%  
Product Number 380547  
Brand ALDRICH

Company Sigma-Aldrich  
Address 3050 Spruce Street  
SAINT LOUIS MO 63103 US

Technical Phone: 800-325-5832  
Fax: 800-325-5052  
Emergency Phone: 314-776-6555

## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
4-ACETOXYSTYRENE, INHIBITED WITH MEHQ	2628-16-2	No

Ingredient Name	CAS #	Percent	SARA 313
4-METHOXYPHENOL	150-76-5	>= 0.02 <= 0.03	No

Formula C10H10O2  
Synonyms p-Acetoxy styrene \* 4-Acetoxy styrene \* C-908 \*  
4-Ethenylphenol acetate \* Phenol, p-vinyl-,  
acetate (6CI,7CI,8CI) \* p-Vinylphenol acetate \*  
4-Vinylphenyl acetate

RTECS Number: SL3784000

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Harmful.

Harmful if swallowed. Irritating to skin. May cause sensitization by skin contact.

Combustible.

## HMIS RATING

HEALTH: 3

FLAMMABILITY: 2

REACTIVITY: 0

## NFPA RATING

HEALTH: 3

FLAMMABILITY: 2

REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

## Section 4 - First Aid Measures

## ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

#### INHALATION EXPOSURE

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

#### DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

#### EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

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### Section 5 - Fire Fighting Measures

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#### FLASH POINT

190 °F 88 °C Method: closed cup

#### AUTOIGNITION TEMP

N/A

#### FLAMMABILITY

N/A

#### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
Specific Hazard(s): Emits toxic fumes under fire conditions.

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### Section 6 - Accidental Release Measures

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#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

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### Section 7 - Handling and Storage

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#### HANDLING

User Exposure: Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not breathe vapor.

#### STORAGE

Suitable: Keep tightly closed.  
Store at 2-8°C

#### SPECIAL REQUIREMENTS

Light sensitive. Moisture sensitive.

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### Section 8 - Exposure Controls / PPE

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## ENGINEERING CONTROLS

Mechanical exhaust required.

## PERSONAL PROTECTIVE EQUIPMENT

**Respiratory:** Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

**Other:** Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

## GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

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## Section 9 - Physical/Chemical Properties

Appearance	Physical State: Liquid	
Property	Value	At Temperature or Pressure
Molecular Weight	162.19 AMU	
pH	N/A	
BP/BP Range	260 °C	760 mmHg
MP/MP Range	7.0 - 8.0 °C	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	1.06 g/cm <sup>3</sup>	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	190 °F 88 °C	Method: closed cup
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	1.538	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

N/A = not available

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## Section 10 - Stability and Reactivity

### STABILITY

Stable: Stable.

Conditions to Avoid: Moisture.

Materials to Avoid: Strong oxidizing agents, Acids, Bases.

#### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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#### Section 11 - Toxicological Information

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##### ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: Harmful if swallowed.

##### SENSITIZATION

Skin: The preceding data, or interpretation of data, was determined using Quantitative Structure Activity Relationship (QSAR) modeling. May cause allergic skin reaction.

##### SIGNS AND SYMPTOMS OF EXPOSURE

Abnormal estrus cycle and reduced ovarian weights were observed in a 28 day dermal rat reproductive study. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

##### TOXICITY DATA

Oral

Rat

1503 mg/kg

LD50

Skin

Rat

> 2000 mg/kg

LD50

##### IRRITATION DATA

Skin

Rabbit

500 mg

24H

Remarks: Severe irritation effect

Eyes

Rabbit

100 mg

Remarks: Mild irritation effect

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#### Section 12 - Ecological Information

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No data available.

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#### Section 13 - Disposal Considerations

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##### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local

environmental regulations.

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## Section 14 - Transport Information

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### DOT

Proper Shipping Name: Combustible liquid, n.o.s.  
UN#: NA1993  
Class: COMBUSTIBLE LIQUID  
Packing Group: Packing Group III  
Hazard Label: None  
PIH: Not PIH

### IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

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## Section 15 - Regulatory Information

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### EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn  
Indication of Danger: Harmful.  
R: 22-38-43  
Risk Statements: Harmful if swallowed. Irritating to skin. May cause sensitization by skin contact.  
S: 36/37  
Safety Statements: Wear suitable protective clothing and gloves.

### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.  
Risk Statements: Harmful if swallowed. Irritating to skin. May cause sensitization by skin contact.  
Safety Statements: Wear suitable protective clothing and gloves.  
US Statements: Combustible.

### UNITED STATES REGULATORY INFORMATION

SARA LISTED: No  
TSCA INVENTORY ITEM: Yes

### CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.  
DSL: Yes  
NDSL: No

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## Section 16 - Other Information

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### DISCLAIMER

For R&D use only. Not for drug, household or other uses.

### WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.