

# SAFETY DATA SHEET



---

<b>Product name</b>	Vinyl acetate	AGHS/EN	
<b>MSDS number</b>	80094	<b>Revision Date</b>	Jul.02.2009
<b>Revision Number</b>	4.01	<b>Issuing date</b>	Jan.13.2010

---

## 1. Identification of the substance/preparation and the company/undertaking

**Product name**

**Vinyl acetate**

### **Manufacturer or supplier's details**

**Celanese (Shanghai) International Trading Co., Ltd.**

Room 239, Xinmao Building  
South Taizhong Road  
Waigaoqiao Free Trade Zone  
Shanghai  
China

**Celanese Pte Ltd**

10 Anson Road, #14-01 / 02  
International Plaza  
Singapore 079903

**Product information:**

Info.Emulsions.CN@celanese.com

**Product Information**

Email: Info.Chemicals.CN@celanese.com

**Emergency telephone number**

+(65) 63050259 (Operations Room direct dial)  
+(65) 62656917 (Operations Room direct dial)  
+(65) 63050200 (Switchboard, ask for Operations Room)  
In China: 86-532-83889090 (NRCC)

or fax request to

+(65) 62644190 (Facsimile to Operations Room)  
+(65) 62664696 (Facsimile to Operations Room)

or email to

opsroom@semco.psa.com.sg

or Call CHEMTREC 703 527 3887 (USA), collect calls accepted

"+" = International Dialing Access Code

**End use:**

Chemical intermediate (including monomers)

## 2. Hazards identification

# SAFETY DATA SHEET



---

<b>Product name</b>	Vinyl acetate	AGHS/EN	
<b>MSDS number</b>	80094	<b>Revision Date</b>	Jul.02.2009
<b>Revision Number</b>	4.01	<b>Issuing date</b>	Jan.13.2010

---

## **2. Hazards identification**

### **GHS Classification**

<b>Hazard</b>	<b>Category</b>
Flammable liquid	Category 2
Acute oral toxicity	Category 5
Acute dermal toxicity	Category 5
Acute inhalation toxicity	Category 4
Skin corrosion/irritation	Category 3
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3
Specific target organ systemic toxicity (repeated exposure)	Category 2

### **Labeling**

**Signal Word** Danger

**Hazard Statement**

- H225 - Highly flammable liquid and vapor
- H303 - May be harmful if swallowed
- H313 - May be harmful in contact with skin
- H316 - Causes mild skin irritation
- H317 - May cause an allergic skin reaction
- H319 - Causes serious eye irritation
- H332 - Harmful if inhaled
- H335 - May cause respiratory irritation
- H351 - Suspected of causing cancer if inhaled
- H373 - May cause damage to organs through prolonged or repeated exposure if inhaled

# SAFETY DATA SHEET



<b>Product name</b>	Vinyl acetate	AGHS/EN	
<b>MSDS number</b>	80094	<b>Revision Date</b>	Jul.02.2009
<b>Revision Number</b>	4.01	<b>Issuing date</b>	Jan.13.2010

## Precautionary Statements

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P235 - Keep cool  
P405 - Store locked up  
P240 - Ground/Bond container and receiving equipment  
P241 - Use explosion-proof electrical/ventilating/lighting/equipment  
P242 - Use only non-sparking tools  
P243 - Take precautionary measures against static discharge  
P260 - Do not breathe dust/fume/gas/mist/spray/spray.  
P264 - Wash hands thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P321 - Specific treatment (see supplemental first aid instructions on this label)  
P308 + P313 - IF exposed or concerned: Get medical attention/advice  
P301+ P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
P330 - Rinse mouth  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention  
P304 + P312 - IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P340 - Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P337 + P313 - If eye irritation persists: Get medical advice/attention  
P370 + P378 - In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction  
P501 - Dispose of contents/container in accordance with local regulations.

## 3. Composition/Information on ingredients

Components	CAS-No	Percent %
Vinyl acetate	108-05-4	99.9 min.

Hydroquinone is present at 3 - 30 ppm as a polymerization inhibitor. Monomethyl ether of hydroquinone may be present upon request.

## 4. First aid measures

### General Information

Remove contaminated, soaked clothing immediately and dispose of safely. Pay attention to own protection. In any case show the physician the Safety Data Sheet.

# SAFETY DATA SHEET



---

<b>Product name</b>	Vinyl acetate	AGHS/EN	
<b>MSDS number</b>	80094	<b>Revision Date</b>	Jul.02.2009
<b>Revision Number</b>	4.01	<b>Issuing date</b>	Jan.13.2010

---

## Inhalation

Keep at rest. Move to fresh air. Call a physician immediately.

## Skin

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If symptoms persist, call a physician.

## Eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

## Ingestion

Rinse with plenty of water. If conscious, drink plenty of water. If swallowed, do not induce vomiting - seek medical advice.

## 5. Fire-fighting measures

**NFPA:**      **Health:** 2                              **Flammability:** 3                              **Instability:** 2

### Suitable extinguishing media

foam, Dry chemical, carbon dioxide (CO<sub>2</sub>)

### Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

### Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases

Under conditions giving incomplete combustion, hazardous gases produced may consist of carbon monoxide

carbon dioxide (CO<sub>2</sub>)

Combustion gases of organic materials must in principle be graded as inhalation poisons

Vapors are heavier than air and may spread along floors

### Special protective equipment for fire-fighters

self-contained breathing apparatus (EN 133).

### Environmental precautions

Water runoff can cause environmental damage Dike and collect water used to fight fire

### Other Information

Cool containers / tanks with water spray

## 6. Accidental release measures

### Personal precautions

Avoid contact with the skin and the eyes. Keep away from heat and sources of ignition. Provide adequate ventilation.

### Environmental precautions

Prevent further leakage or spillage. Do not discharge into the drains/surface waters/groundwater. Material creates a special hazard because it floats on water.. Caution: Spontaneous polymerization can occur if material is released or mixed with incompatibles..

# SAFETY DATA SHEET



Product name	Vinyl acetate	AGHS/EN	
MSDS number	80094	Revision Date	Jul.02.2009
Revision Number	4.01	Issuing date	Jan.13.2010

## Methods for cleaning Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Dispose of in accordance with local regulations.

## 7. Handling and storage

### Handling

#### Advice on safe handling

Provide sufficient air exchange and/or exhaust in work rooms.

#### Protection - fire and explosion:

Keep away from sources of ignition - No smoking Take necessary action to avoid static electricity discharge Ground and bond containers when transferring material In case of fire, emergency cooling with water spray should be available

Blanketing vinyl acetate under an inert atmosphere eliminates flammable vapor in the head space and contamination with atmospheric moisture. Bulk storage of vinyl acetate at ambient temperatures is an acceptable practice when there is a routine turnover of the tank contents every 60 days or less. Inhibitor levels should be monitored if a stability problem is suspected.

### Storage

#### Technical measures/Storage conditions

Keep tightly closed in a dry, cool and well-ventilated place Handle and open container with care Store at temperatures not exceeding 30 °C/ 86 °F

#### Incompatible products

oxidizing agents radical initiators strong acids amines

## 8. Exposure controls / personal protection

### ACGIH Exposure Limits

Components	TWA
Vinyl acetate	10 PPM

Components	STEL
Vinyl acetate	15 PPM

### Engineering measures

General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Explosion-proof equipment (for example fans, switches, and grounded ducts) should be used in mechanical ventilation systems.

### Personal protective equipment

#### General advice

Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Use only in an area equipped with a safety shower. Hold eye wash fountain available.

# SAFETY DATA SHEET



Product name	Vinyl acetate	AGHS/EN	
MSDS number	80094	Revision Date	Jul.02.2009
Revision Number	4.01	Issuing date	Jan.13.2010

<b>Hygiene measures</b>	When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.
<b>Respiratory protection</b>	respirator with A/PA filter.
<b>Eye protection</b>	Tightly fitting safety goggles. In addition to goggles, wear a face shield if there is a reasonable chance for splash to the face. Equipment should conform to EN 166.
<b>skin protection</b>	impervious clothing
<b>Hand protection</b>	Chemicals resistant gloves
<b>Type</b>	Butoject (Company KCL) or comparable article; or refer to glove manufacturer's recommendation
<b>Evaluation</b>	according to EN 374: level 4
<b>Material thickness</b>	approx 0.3 mm
<b>Break through time</b>	approx 120 min
<b>Suitable material</b>	butyl-rubber

## 9. Physical and chemical properties

<b>Appearance</b>	
<b>Form</b>	liquid
<b>Colour</b>	colourless
<b>Odor</b>	sweet
<b>Molecular Weight</b>	86.09 g / mol
<b>Flash point</b>	-8°C
<b>Method</b>	closed cup
<b>Ignition temperature</b>	385°C
<b>Method</b>	DIN 51794
<b>Lower explosion limit</b>	2.6 Vol. %
<b>Upper explosion limit</b>	13.4 Vol. %
<b>Melting point/range</b>	-93.2°C
<b>Boiling point/range</b>	72°C @ 1013 hPa
<b>Density</b>	0.93 g/ml @ 20°C
<b>pH</b>	Neutral
<b>Viscosity</b>	0.43 mPa*s @ 20°C
<b>vapor pressure</b>	120 hPa @ 20°C 445 hPa @ 50°C
<b>vapor density</b>	3.0 (Air=1)
<b>Water solubility</b>	20 g/l @ 20°C
<b>Partition coefficient (n-octanol/water)</b>	0.73 (measured) Hansch/Leo

# SAFETY DATA SHEET



Product name	Vinyl acetate	AGHS/EN	
MSDS number	80094	Revision Date	Jul.02.2009
Revision Number	4.01	Issuing date	Jan.13.2010

## 10. Stability and reactivity

<b>Stability</b>	Stable under normal conditions of handling, use and transportation.
<b>Conditions to avoid</b>	Avoid any source of ignition.. Avoid contact with heat, sparks, open flame, and static discharge.. Avoid temperatures above 30 °C / 86 °F.
<b>Materials to avoid</b>	Keep away from:., oxidizing agents, radical initiators , strong acids, amines
<b>Thermal decomposition</b>	No decomposition if used as directed. If heated to thermal decomposition the following decomposition products may occur depending on the conditions. carbon oxides.
<b>Hazardous reactions</b>	Polymerization can occur. May polymerize violently or explosively if contaminated or overheated. . Uncontrolled polymerization can cause rapid evolution of heat and increased pressure which can result in violent rupture of storage vessels or containers..

## 11. Toxicological information

### Vinyl acetate

<b>Oral</b>	LD50: 2920 mg/kg, rat
<b>Dermal</b>	LD50: 2335 mg/kg, rabbit
<b>Inhalation</b>	LC50: 4000 ppm, rat, 4h
<b>Skin irritation</b>	Mild skin irritation
Species	rabbit
Method	OECD 404
<b>Skin Sensitization</b>	nonsensitizer
Species	mouse
Method	OECD 429
<b>Eye Irritation</b>	Mild eye irritation
Species	rabbit eye
Method	OECD 405
<b>Carcinogenic effects</b>	Has been shown to cause cancer in lifetime rat inhalation and rat and mouse drinking water studies at the site of contact at non-physiologically relevant doses
<b>Carcinogenic Effects</b>	No evidence of carcinogenicity
Species	mice
Study	inhalation lifetime study
<b>in vitro Mutagenicity</b>	Positive and negative results
<b>in vivo Mutagenicity</b>	Both positive and negative results
	Not a mutagenic concern in human at physiologically relevant routes of entry
<b>Reproductive toxicity</b>	No toxicity to reproduction
Routes of exposure	oral drinking water

# SAFETY DATA SHEET



Product name	Vinyl acetate	AGHS/EN	
MSDS number	80094	Revision Date	Jul.02.2009
Revision Number	4.01	Issuing date	Jan.13.2010

## 11. Toxicological information

Species	rat
<b>Developmental effects</b>	no adverse developmental effects
Routes of exposure	oral drinking water and Inhalation
Species	rat
<b>Repeated exposure</b>	28-day and 90-day effect respiratory tract irritation extensive degeneration of upper respiratory tract epithelium Degeneration of the olfactory mucosa was observed
Routes of exposure	Inhalation
Species	rats

## 12. Ecological information

### Vinyl acetate

<b>Toxicity to fish</b>	LC50: 19 mg/l (96h)
Species:	Pimephales promelas (Fathead minnow)
Species:	LC50: 18 mg/l (96h)
<b>Toxicity to daphnia</b>	Lepomis macrochirus (Bluegill sunfish)
Species:	EC50: 12.6 mg/l (48h)
<b>Toxicity to algae</b>	Daphnia magna
Species:	EC50: 8.8 mg/l (72h)
<b>Toxicity to bacteria</b>	Selenastrum capricornutum (green algae)
<b>Biodegradation</b>	EC50: 6.0 mg/l
<b>Bioconcentration factor (BCF)</b>	51 - 62 % (5d)
<b>Bioaccumulation</b>	2
	Bioaccumulative potential - low

## 13. Disposal considerations

### Product information

Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal.

### Uncleaned empty packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

## 14. Transport information

### US Department of Transportation

UN/NA Number:	UN 1301
Proper Shipping Name	Vinyl Acetate, stabilized
Hazard class	3
Packing Group	II
Reportable Quantity (RQ)	5000 lb/2270kg

# SAFETY DATA SHEET



Product name	Vinyl acetate	AGHS/EN	
MSDS number	80094	Revision Date	Jul.02.2009
Revision Number	4.01	Issuing date	Jan.13.2010

## 14. Transport information

Emergency Resp. Guide 129P

### ADR/RID

UN/ID No.	UN 1301
Proper Shipping Name	Vinyl Acetate, stabilized
Hazard Class	3
Packing group	II
Tunnel Restriction Code	(D/E)
Hazard Number	339

### ADNR

ADNR: Container and Tanker

UN/ID No.	UN 1301
Proper Shipping Name	Vinyl Acetate, stabilized
Hazard Class	3
Packing group	II

### ICAO/IATA

UN-No.	UN 1301
Proper Shipping Name	Vinyl Acetate, stabilized
Hazard Class	3
Packing group	II

### IMDG

UN/ID No.	UN 1301
Proper Shipping Name	Vinyl Acetate, stabilized
Hazard Class	3
Packing group	II
EmS Code	F-E, S-D

## 15. Regulatory information

### International Chemical Inventory

Listed on the chemical inventories of the following countries or qualifies for an exemption:  
AUSTRALIA, CHINA, CANADA, EUROPE, KOREA, PHILIPPINES, JAPAN (ENCs), UNITED STATES

## 16. Other information

HMIS: Health: 2\* Flammability: 3 Physical hazard: 2

### Prepared By

Product Stewardship Department  
Celanese

For further information, see:

For more information, other material safety data sheets or technical data sheets please consult the Celanese homepage ([www.celanese.com](http://www.celanese.com)).

# SAFETY DATA SHEET



---

<b>Product name</b>	Vinyl acetate	AGHS/EN	
<b>MSDS number</b>	80094	<b>Revision Date</b>	Jul.02.2009
<b>Revision Number</b>	4.01	<b>Issuing date</b>	Jan.13.2010

---

## Other Information:

Observe national and local legal requirements.

Changes against the previous version are marked by \*\*\*

## Sources of key data used to compile the datasheet

Information contained in this safety data sheet is based on Celanese owned data and public sources deemed valid or acceptable. The absence of data elements required by ANSI or 1907/2006 indicates, that no data meeting these requirements is available.

## Further information

This information is based on our present state of knowledge. It shall describe our products regarding safety requirements and shall not be construed as a guarantee or statement of condition and/or quality.