

SAFETY DATA SHEET

Creation Date 21-Sep-2009 Revision Date 23-Aug-2022 Revision Number 7

1. Identification

Product Name Vinyl acetate, stabilized

Cat No.: AC140840000; AC140840010; AC140840025; AC140840100;

AC140840250

CAS No 108-05-4

Synonyms Ethenyl ethanoate; Vinyl A monomer; Ethenyl acetate

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids

Acute Inhalation Toxicity - Vapors

Carcinogenicity

Category 2

Category 4

Category 2

Specific target organ toxicity (single exposure)

Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word

Danger

Hazard Statements

Highly flammable liquid and vapor

Harmful if inhaled May cause respiratory irritation Suspected of causing cancer



Precautionary Statements

Prevention

Use personal protective equipment as required

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Take precautionary measures against static discharge

Avoid breathing dust/fume/gas/mist/vapors/spray

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Use only non-sparking tools

Keep cool

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

Other hazards

Contains a known or suspected endocrine disruptor.

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Vinyl acetate	108-05-4	> 99
Hydroquinone	123-31-9	< 0.01

4. First-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and

effects

Notes to Physician

Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Carbon dioxide (CO₂). Dry chemical. Water mist may be used to cool closed containers.

Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media No information available

-8 °C / 17.6 °F **Flash Point**

Method -No information available

385 °C / 725 °F **Autoignition Temperature**

Explosion Limits

14.0% Upper Lower 2.6%

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Flammable. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO2).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health **Flammability** Instability Physical hazards 2 3 N/A

Accidental release measures

Ensure adequate ventilation. Use personal protective equipment as required. Remove all **Personal Precautions**

sources of ignition. Take precautionary measures against static discharges.

Should not be released into the environment. See Section 12 for additional Ecological **Environmental Precautions**

Information. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Up Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Handling and storage

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not Handling

get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open

flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

Storage.

Keep in a dry place. Keep container tightly closed. Keep away from heat, sparks and flame. Protect from direct sunlight. Refrigerator/flammables. May form explosive peroxides on prolonged storage. Keep container tightly closed in a dry and well-ventilated place. Incompatible Materials. Acids. Bases. oxygen. Peroxides. Acid anhydrides. Metals.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Vinyl acetate	TWA: 10 ppm	(Vacated) TWA: 10 ppm	Ceiling: 4 ppm	TWA: 10 ppm
	STEL: 15 ppm	(Vacated) TWA: 30 mg/m ³	Ceiling: 15 mg/m ³	STEL: 15 ppm
		(Vacated) STEL: 20 ppm		
		(Vacated) STEL: 60 mg/m ³		
Hydroquinone	TWA: 1 mg/m ³	(Vacated) TWA: 2 mg/m ³	IDLH: 50 mg/m ³	TWA: 1 mg/m ³
		TWA: 2 mg/m ³	Ceiling: 2 mg/m ³	

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering MeasuresUse explosion-proof electrical/ventilating/lighting equipment. Ensure adequate ventilation,

especially in confined areas. Ensure that eyewash stations and safety showers are close to

the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if

exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical StateLiquidAppearanceClearOdorsweet

Odor Threshold No information available

Melting Point/Range -93 °C / -135.4 °F

Boiling Point/Range 72 - 73 °C / 161.6 - 163.4 °F

Flash Point

-8 °C / 17.6 °F

Evaporation Rate

No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

Upper 14.0% **Lower** 2.6%

Vapor Pressure No information available

Vapor Density No information available

Specific Gravity 0.930 Solubility 23 a/L @ 20 °C

No data available Partition coefficient; n-octanol/water 385 °C / 725 °F **Autoignition Temperature Decomposition Temperature** No information available **Viscosity** No information available

Molecular Formula C4 H6 O2 **Molecular Weight** 86.09

10. Stability and reactivity

None known, based on information available Reactive Hazard

Stability May form explosive peroxides. Stable under normal conditions. Light sensitive.

Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Exposure

to light. Incompatible products.

Incompatible Materials Acids, Bases, oxygen, Peroxides, Acid anhydrides, Metals

Hazardous Decomposition Products Carbon monoxide (CO₂), Carbon dioxide (CO₂)

Hazardous Polymerization Hazardous polymerization may occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Vinyl acetate	LD50 = 2900 mg/kg (Rat)	LD50 = 2335 mg/kg (Rabbit)	LC50 = 3680 ppm (Rat) 4 h
Hydroquinone	LD50 = 298 mg/kg (Rat)	LD50 = 74800 mg/kg (Rabbit)	Not listed

Toxicologically Synergistic

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No information available

Irritation No information available Sensitization No information available

Carcinogenicity Possible cancer hazard. May cause cancer based on animal data. The table below

indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Vinyl acetate	108-05-4	Group 2B	Not listed	A3	X	A3
Hydroquinone	123-31-9	Not listed	Not listed	A3	Not listed	A3

IARC (International Agency for Research on Cancer)

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

ACGIH: (American Conference of Governmental Industrial

Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

A1 - Known Human Carcinogen A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

A2 - Suspected Human Carcinogen

A3 - Confirmed Animal Carcinogen A1 - Confirmed Human Carcinogen

A4 - Not Classifiable as a Human Carcinogen A5 - Not Suspected as a Human Carcinogen

Mutagenic Effects Not mutagenic in AMES Test

No information available. **Reproductive Effects Developmental Effects** No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

Aspiration hazard No information available

delayed

Symptoms / effects,both acute and Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

tiredness, nausea and vomiting

Endocrine Disruptor Information

Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information	
Vinyl acetate	Group III Chemical	Not applicable	Not applicable	

Other Adverse Effects

The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

This product contains the following substance(s) which are hazardous for the environment. Contains a substance which is:. Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Vinyl acetate	Not listed	LC50: = 14 mg/L, 96h static (Pimephales promelas) LC50: 26.1 - 36.63 mg/L, 96h static (Poecilia reticulata) LC50: 15.04 - 21.54 mg/L, 96h static (Lepomis macrochirus)	EC50 = 2080 mg/L 5 min	Not listed
Hydroquinone	EC50: = 0.335 mg/L, 72h (Pseudokirchneriella subcapitata)	LC50: = 0.044 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: 0.1 - 0.18 mg/L, 96h static (Pimephales promelas) LC50: = 0.17 mg/L, 96h (Brachydanio rerio) LC50: = 0.044 mg/L, 96h flow-through (Pimephales promelas)	EC50 = 0.038 mg/L 15 min EC50 = 0.0382 mg/L 30 min EC50 = 0.042 mg/L 5 min EC50 = 23.75 mg/L 60 min	EC50: = 0.29 mg/L, 48h (Daphnia magna)

Persistence is unlikely based on information available. **Persistence and Degradability**

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its volatility.

Component	log Pow
Vinyl acetate	0.73
Hydroquinone	0.59

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN1301

Proper Shipping Name VINYL ACETATE, STABILIZED

Hazard Class 3 Packing Group II

TDG

UN-No UN1301

Proper Shipping Name VINYL ACETATE, STABILIZED

Hazard Class 3
Packing Group ||

<u>IATA</u>

UN-No UN1301

Proper Shipping Name VINYL ACETATE, STABILIZED

Hazard Class 3 Packing Group II

IMDG/IMO

UN-No UN1301

Proper Shipping Name VINYL ACETATE, STABILIZED

Hazard Class 3
Packing Group

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Vinyl acetate	108-05-4	Χ	ACTIVE	-
Hydroquinone	123-31-9	X	ACTIVE	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Vinyl acetate	108-05-4	Χ	-	203-545-4	Χ	Х	Х	Χ	Χ	KE-35324
Hydroquinone	123-31-9	Χ	-	204-617-8	Χ	Х	Χ	Χ	Χ	KE-35112

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Vinyl acetate	108-05-4	> 99	0.1
Hydroquinone	123-31-9	< 0.01	1.0

SARA 311/312 Hazard Categories

See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Vinyl acetate	X	5000 lb	-	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Vinyl acetate	X		-
Hydroquinone	X		-

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Vinyl acetate	5000 lb	5000 lb
Hydroquinone	100 lb	100 lb

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Vinyl acetate	X	X	X	X	X
Hydroquinone	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product contains the following DHS chemicals:

Legend - STQs = Screening Threshold Quantities, APA = A placarded amount

Component	DHS Chemical Facility Anti-Terrorism Standard
Vinyl acetate	Release STQs - 10000lb

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Component		REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Vinyl acetate	108-05-4	-	Use restricted. See item	-

			75. (see link for restriction details)	
Hydroquinone	123-31-9	-	Use restricted. See item 75. (see link for restriction details)	

https://echa.europa.eu/substances-restricted-under-reach

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Vinyl acetate	108-05-4	Listed	Not applicable	Not applicable	Not applicable
Hydroquinone	123-31-9	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	(2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Vinyl acetate	108-05-4	Not applicable	Not applicable	Not applicable	Not applicable
Hydroquinone	123-31-9	Not applicable	Not applicable	Not applicable	Annex I - Y39

	16. Other information	
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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS