SAFETY DATA SHEET

Creation Date 21-Sep-2009 **Revision Date** 31-Jan-2025 **Revision Number** 8

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
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number
For information **US** call: 001-800-227-6701 / **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	Category 2
Acute Inhalation Toxicity - Vapors	Category 4
Carcinogenicity	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.
WARNING. Cancer - https://www.p65warnings.ca.gov/.

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

5. Fire-fighting measures

Suitable Extinguishing Media	Carbon dioxide (CO_2). 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
Flash Point	-8 °C / 17.6 °F
Method -	No information available
Autoignition Temperature	385 °C / 725 °F

Explosion Limits

Upper	14.0%
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 (CO_2).
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	2	N/A

6. Accidental release measures

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges.
Environmental Precautions	Should not be released into the environment. See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer system.
Methods for Containment and Clean Up	Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7. Handling and Storage

Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not 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	Mexico OEL (TWA)
Vinyl acetate	TWA: 10 ppm STEL: 15 ppm	(Vacated) TWA: 10 ppm (Vacated) TWA: 30 mg/m³ (Vacated) STEL: 20 ppm (Vacated) STEL: 60 mg/m³	Ceiling: 4 ppm Ceiling: 15 mg/m³	TWA: 10 ppm STEL: 15 ppm
Hydroquinone	TWA: 1 mg/m³	(Vacated) TWA: 2 mg/m³ TWA: 2 mg/m³	IDLH: 50 mg/m³ Ceiling: 2 mg/m³	TWA: 1 mg/m³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Use 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.

Recommended Filter type: Organic gases and vapours filter. Type A. Brown. conforming to EN14387.

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

9. Physical and chemical properties

Physical State	Liquid
Appearance	Clear
Odor	sweet
Odor Threshold	No information available
pH	7
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 g/L @ 20 °C
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	385 °C / 725 °F
Decomposition Temperature	No information available
Viscosity	No information available
Molecular Formula	C4 H6 O2
Molecular Weight	86.09

10. Stability and reactivity

Reactive Hazard None known, based on information available

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 (CO), Carbon dioxide (CO_2)

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 No information available

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

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)

ACGIH: (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens	*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

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

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

Aspiration hazard No information available

Symptoms / effects,both acute and delayed 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: 0.1 - 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) LC50: = 0.044 mg/L, 96h flow-through (Oncorhynchus mykiss)	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 and Degradability Persistence is unlikely based on information available.

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 II

IATA

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 II

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	X	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	X	-	203-545-4	X	X	X	X	X	KE-35324
Hydroquinone	123-31-9	X	-	204-617-8	X	X	X	X	X	KE-35112

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

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

Component	Hazardous Substances RQs	CERCLA Extremely Hazardous Substances RQs	SARA Reportable Quantity (RQ)
Vinyl acetate	5000 lb	5000 lb	5000 lb 2270 kg
Hydroquinone	100 lb	100 lb	100 lb 45.4 kg

California Proposition 65 This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Vinyl acetate	108-05-4	Carcinogen	-	

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	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Vinyl acetate	108-05-4	-	Use restricted. See entry 75. (see link for restriction details)	-
Hydroquinone	123-31-9	-	Use restricted. See entry 75. (see link for restriction details)	-

REACH links
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

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?
Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	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