

Safety Data Sheet

5 Mix VOCs in ethyl acetate

Version : V2.0.0.1

Report No. : BWQ9390-2016-MSDS-US

Creation Date : 2025/10/24

Revision Date : -



*Prepared according to American OSHA HCS-2024 (29 CFR 1910.1200)

1 Identification

Product identifier

Product Name	5 Mix VOCs in ethyl acetate
Cat No.	BWQ9390-2016
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable

Recommended use of the product and restrictions on use

Relevant identified uses	Please consult manufacturer.
Uses advised against	Please consult manufacturer.

Details of the supplier of the Safety Data Sheet

Name of the company	Weiyel Inc
Address of the company	Hedian Light Industrial Park, Chengguan Town, Shangcheng County, Xinyang City, Henan Province, China
Post code	465350
Telephone number	010-58103678
Fax number	010-84840368
E-mail address	info@weiyel.com

Emergency phone number

Emergency phone number	010-58103678
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2 Hazard(s) identification

Hazard classification according to 29 CFR 1910.1200

Flammable liquids	Category 2
Sensitization - skin	Category 1
Serious eye damage/irritation	Category 2
Acute Toxicity - Inhalation	Category 3
Specific target organ toxicity - single exposure; narcotic effects	Category 3
Carcinogenicity	Category 1B
Reproductive Toxicity	Category 1B
Reproductive Toxicity - effects	Additional

on or via lactation	
Label elements	
Hazard pictograms	
Signal word	Danger
Hazard statements	
H225	Highly flammable liquid and vapour
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
H336	May cause drowsiness or dizziness
H350	May cause cancer
H360	May damage fertility and the unborn child
H362	May cause harm to breast-fed children
Precautionary statements	
◆ Prevention	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe gas/mist/vapour/spray.
P263	Avoid contact during pregnancy and while nursing.
P264	Wash hands and other parts of the body (if related) thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or with adequate ventilation.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
◆ Response	
P321	Specific treatment (see related instructions on the label).
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	Small fire: dry chemical, CO ₂ or alcohol-resistant foam; Large fire: alcohol-resistant foam; Fire involving tanks, rail tank cars or highway tanks: Fight fire from maximum distance or use unmanned master stream devices or monitor

	nozzles. Cool containers with flooding quantities of water until well after fire is out.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

◆ Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.

◆ Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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| Other hazards

	Not applicable.
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| Hazard description

◆ Physical and chemical hazards	Highly flammable liquids, its vapor and air mixture can form explosive mixture.
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◆ Health hazards

Inhaled	Cough. Dizziness. Drowsiness. Headache. Nausea. Sore throat. Unconsciousness. Weakness.
Ingestion	Accidental ingestion of the product may be harmful to the health of the individual.
Skin Contact	Dry skin.
Eye	Redness. Pain.

◆ Environmental hazards

	Please refer to 12th chapter of SDS.
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3 Composition/information on ingredients

Substance/mixture	Mixture
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Component	CAS No.	EC No.	Concentration (wt, %)
Ethyl acetate	141-78-6	205-500-4	98.5
Dichlorvos	62-73-7	200-547-7	0.1
2,4,6-trichlorophenol	88-06-2	201-795-9	0.1
Hexachlorobenzene	118-74-1	204-273-9	0.1
Dimethoate	60-51-5	200-480-3	0.1
Pentachlorophenol	87-86-5	201-778-6	0.1
Lindane	58-89-9	200-401-2	0.1
Chlorothalonil	1897-45-6	217-588-1	0.1
Parathion-methyl	298-00-0	206-050-1	0.1
Heptachlor	76-44-8	200-962-3	0.1

Malathion	121-75-5	204-497-7	0.1
Chlorpyrifos	2921-88-2	220-864-4	0.1
Parathion	56-38-2	200-271-7	0.1
o,p'-DDT	789-02-6	212-332-5	0.1
Bis(2-ethylhexyl) phthalate	117-81-7	204-211-0	0.1
Deltamethrin	52918-63-5	258-256-6	0.1

4 First-aid measures

Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Skin contact	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
Ingestion	Rinse mouth. Give plenty of water to drink.
Inhalation	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

Most important symptoms/effects, acute and delayed

1	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
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Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Small fire: dry chemical, CO ₂ or alcohol-resistant foam; Large fire: alcohol-resistant foam; Fire involving tanks, rail tank cars or highway tanks: Fight fire from maximum distance or use unmanned master stream devices or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out.
Unsuitable extinguishing media	Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the substance or mixture

1	Will form explosive mixtures with air.
2	Fire exposed containers may vent contents through pressure relief valves thereby increasing fire intensity and/or vapour concentration.
3	Vapours may travel to source of ignition and flash back.
4	Liquid and vapour are flammable.
5	May emit poisonous fumes on fire.
6	Development of hazardous combustion gases or vapor possible in the event of fire.
7	May expand or decompose explosively when heated or involved in fire.

Special protective equipment and precautions for fire-fighters

- 1 As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
- 2 Fight fire from a safe distance, with adequate cover.
- 3 Prevent fire extinguishing water from contaminating surface water or the ground water system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

- 1 Avoid breathing vapours and contacting with skin and eye.
- 2 Beware of vapours accumulating to form explosive concentrations.
- 3 Vapours can accumulate in low areas.
- 4 Emergency personnel wear positive pressure self-contained breathing apparatus. Wear protective and anti-static clothing. Wear chemical impermeable gloves.
- 5 Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- 6 Do not touch or walk through spilled material.
- 7 Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- 8 Use personal protective equipment, do not breathe gas/mist/vapour/spray.
- 9 Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
- 10 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

- 1 Prevent further leakage or spillage if safe to do so.
- 2 Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

- 1 It is recommended that emergency personnel wear positive pressure self-contained breathing apparatus and wear anti-static clothing.
- 2 In case of small amount of spillage, use clean non sparking tools to collect absorption materials.
- 3 In case of large amount of spillage, construct cofferdam or dig a hole to collect the spillage. Use foam cover to reduce evaporation. Water spray mist can reduce evaporation, but can not reduce the flammability of the leakage in the restricted space.
- 4 Collect absorbent material using a clean, non-sparking tool.
- 5 Cover with anti-solvent foam to reduce evaporation.
- 6 Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- 7 Water spray reduces evaporation but does not reduce the flammability of spills in confined spaces.
- 8 Do not touch or cross spills.
- 9 It is recommended that emergency personnel wear positive pressure self-contained breathing apparatus and wear anti-virus suits.
- 10 Spray water disperses the vapor and dilutes the liquid spill.
- 11 Do not touch broken containers and spills before putting on appropriate protective clothing.
- 12 Cut off the source of the leak as much as possible.
- 13 Keep leaks in a ventilated place.
- 14 Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- 15 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

16	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container.
17	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7 Handling and storage

Precautions for safe handling

1	Avoid inhalation of vapors.
2	Use only non-sparking tools.
3	To prevent fire caused by electrostatic discharge steam, equipment on all metal parts should be grounded.
4	Use explosion proof equipment.
5	Handling is performed in a well ventilated place.
6	Wear suitable protective equipment.
7	Avoid contact with skin and eyes.
8	Keep away from heat/sparks/open flames/ hot surfaces.

Conditions for safe storage, including any incompatibilities

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.

8 Exposure controls/personal protection

Control parameters

◆ Occupational exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m ³	ppm	mg/m ³
Ethyl acetate	Japan - JSOH(2024–2025)	200	720	-	-
	Permissible exposure standards for workers in the workplace	400	1440	500	1440
	Australia	200	720	400	1440
	Canada - Ontario	400	-	-	-
	European Union	200	734	400	1468
	New Zealand	200	720	-	-
Dichlorvos	Permissible exposure standards for workers in the workplace	0.1	1	0.3	2
	Australia	0.1	0.9	-	-
	Canada - Ontario	-	0.1	-	-
	New Zealand	0.1	0.9	-	-

	USA - ACGIH	-	0.1(inhalable fraction and vapor)	-	-
	USA - NIOSH	-	1	-	-
2,4,6-trichlorophenol	Denmark	-	0.5	-	1
	Sweden	-	0.5	-	1.5
Hexachlorobenzene	Canada - Ontario	-	0.002	-	-
	USA - ACGIH	-	0.002	-	-
	Belgium	-	0.002	-	-
	Canada - Québec	-	0.025	-	-
	Denmark	-	0.025	-	0.05
	Finland	-	0.002	-	-
Dimethoate	Poland	-	0.2	-	0.6
	Romania	-	7	-	10
Pentachlorophenol	Japan - JSOH(2024-2025)	-	0.5	-	-
	Permissible exposure standards for workers in the workplace	-	0.5	-	1.5
	Australia	-	0.5	-	-
	Canada - Ontario	-	0.5	-	1
	New Zealand	-	0.5	-	-
	USA - ACGIH	-	0.5(inhalable fraction and vapor)	-	1(inhalable fraction and vapor)
Lindane	Permissible exposure standards for workers in the workplace	-	-	-	-
	Australia	0.008	0.1	-	-
	Canada - Ontario	-	0.5	-	-
	New Zealand	-	0.1	-	-
	USA - ACGIH	-	0.5	-	-
	USA - NIOSH	-	0.5	-	-
Parathion-methyl	Permissible exposure standards for workers in the workplace	-	0.2	-	0.6
	Canada - Ontario	-	0.02	-	-
	USA - ACGIH	-	0.02(inhalable fraction and vapor)	-	-
	USA - NIOSH	-	0.2	-	-

	Austria	-	0.2	-	0.4
	Belgium	-	0.02	-	-
Heptachlor	Permissible exposure standards for workers in the workplace	-	0.5	-	1.5
	Australia	-	0.5	-	-
	Canada - Ontario	-	0.05	-	-
	USA - ACGIH	-	0.05	-	-
	USA - NIOSH	-	0.5	-	-
	USA - OSHA	-	0.5	-	-
Malathion	Japan - JSOH(2024-2025)	-	10	-	-
	Permissible exposure standards for workers in the workplace	-	10	-	15
	Australia	-	10	-	-
	Canada - Ontario	-	1	-	-
	New Zealand	-	1	-	-
	USA - ACGIH	-	1(inhalable fraction and vapor)	-	-
Chlorpyrifos	Australia	-	0.2	-	-
	Canada - Ontario	0.1	-	-	-
	New Zealand	-	0.2	-	-
	USA - ACGIH	-	0.1(inhalable fraction and vapor)	-	-
	USA - NIOSH	-	0.2	-	0.6
	Austria	-	0.2	-	0.4
Parathion	Japan - JSOH(2024-2025)	-	0.1	-	-
	Permissible exposure standards for workers in the workplace	-	0.1	-	0.3
	Australia	-	0.1	-	-
	Canada - Ontario	-	0.05	-	-
	USA - ACGIH	-	0.05(inhalable fraction and vapor)	-	-
	USA - NIOSH	-	0.05	-	-
Bis(2-ethylhexyl) phthalate	Japan - JSOH(2024-2025)	-	5	-	-

	5)				
	Permissible exposure standards for workers in the workplace	-	5	-	10
	Australia	-	5	-	10
	Canada - Ontario	-	3	-	5
	New Zealand	-	5	-	10
	USA - ACGIH	-	0.1	-	-

Engineering controls

- 1 Ensure adequate ventilation, especially in confined areas.
- 2 Ensure that eyewash stations and safety showers are close to the workstation location.
- 3 Use explosion-proof electrical/ventilating/lighting/equipment.
- 4 Set up emergency exit and necessary risk-elimination area.

Personal protection equipment

General requirement					
Eye protection	Must wear appropriate safety goggles.				
Hand protection	Must wear anti static chemical protective gloves.				
Respiratory protection	Must wear appropriate personal dust proof gas mask.				
Skin and body protection	Must wear anti static chemical protective clothing and anti static shoes.				

9 Physical and chemical properties and safety characteristics

Physical and chemical properties

Appearance (physical state, color, etc.)	Clear, colorless liquid
Odor	No information available
Odor threshold	No information available
pH	No information available
Melting point/freezing point(°C)	-84 (Ethyl acetate)
Initial boiling point and boiling range(°C)	77 (Ethyl acetate)
Flash point(Closed cup, °C)	-4 (Ethyl acetate)
Evaporation rate	No information available
Flammability	No information available
Upper/lower explosive limits[%(v/v)]	Upper limit : 12.8 (Ethyl acetate) ; Lower limit : 2.0 (Ethyl acetate)
Vapor pressure	10kPa (20°C, Ethyl acetate)
Vapor density(Air = 1)	3.0 (Ethyl acetate)
Relative density(Water=1)	0.9 (Ethyl acetate)
Solubility	Insoluble in water (Ethyl acetate)

n-octanol/water partition coefficient	0.73 (Ethyl acetate)
Auto-ignition temperature(°C)	427 (Ethyl acetate)
Decomposition temperature(°C)	No information available
Kinematic viscosity	No information available

10 Stability and reactivity

Stability and reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions	In contact with metal alkoxides may cause a fire.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	Metal alkyl oxide, metal hydride, inorganic peroxide, nitrate and halogens oxyacid salts.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicological information

Acute toxicity

Component	LD ₅₀ (oral)	LD ₅₀ (dermal)	LC ₅₀ (inhalation,4h)
Dimethoate	150mg/kg(Rat)	353mg/kg(Rat)	No information available
Malathion	2100mg/kg(Rat)	4100mg/kg(Rabbit)	> 5.2mg/L(Rat)
Pentachlorophenol	80mg/kg(Rat)	80mg/kg(Rat)	No information available
Lindane	88mg/kg(Rat)	50mg/kg(Rabbit)	No information available
Parathion-methyl	14mg/kg(Rat)	300mg/kg(Rabbit)	0.034mg/L(Rat)
Ethyl acetate	5620mg/kg(Rat)	> 18000mg/kg(Rabbit)	No information available
Dichlorvos	57~108mg/kg(Rat)	107mg/kg(Rabbit)	0.015mg/L(Rat)
Chlorpyrifos	135mg/kg(Rat)	2000mg/kg(Rabbit)	> 0.2mg/L(Rat)
2,4,6-trichlorophenol	820mg/kg(Rat)	No information available	No information available
Hexachlorobenzene	10000mg/kg(Rat)	10000mg/kg(Rat)	No information available
Deltamethrin	135mg/kg(Rat)	2000mg/kg(Rabbit)	No information available
Chlorothalonil	>10000mg/kg(Rat)	> 10000mg/kg(Rabbit)	0.10mg/L(Rat)
Parathion	13mg/kg(Rat)	15mg/kg(Rabbit)	0.084mg/L(Rat)
Heptachlor	40mg/kg(Rat)	500mg/kg(Rabbit)	No information available
Bis(2-ethylhexyl) phthalate	30000mg/kg(Rat)	25000mg/kg(Rabbit)	No information available

Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP	OSHA Carcinogen List

Ethyl acetate	Not Listed	Not Listed	Not Listed
Dichlorvos	Category 2B	Not Listed	Not Listed
2,4,6-trichlorophenol	Category 2B	Category R	Not Listed
Hexachlorobenzene	Category 2B	Category R	Not Listed
Dimethoate	Not Listed	Not Listed	Not Listed
Pentachlorophenol	Category 1	Category R	Not Listed
Lindane	Category 1	Category R	Not Listed
Chlorothalonil	Category 2B	Not Listed	Not Listed
Parathion-methyl	Category 3	Not Listed	Not Listed
Heptachlor	Category 2B	Not Listed	Not Listed
Malathion	Category 2A	Not Listed	Not Listed
Chlorpyrifos	Not Listed	Not Listed	Not Listed
Parathion	Category 2B	Not Listed	Not Listed
o,p'-DDT	Not Listed	Not Listed	Not Listed
Bis(2-ethylhexyl) phthalate	Category 2B	Category R	Not Listed
Deltamethrin	Category 3	Not Listed	Not Listed

| Others

5 Mix VOCs in ethyl acetate

Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Causes serious eye irritation(Category 2)
Skin sensitization	May cause an allergic skin reaction(Category 1)
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	May damage fertility and the unborn child(Category 1B); May cause harm to breast-fed children(Additional)
STOT-single exposure	May cause drowsiness or dizziness(Category 3)
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met

12 Ecological information

| Acute aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
Dimethoate	LC ₅₀ : 7.65mg/L (96h)(Fish)	EC ₅₀ : 0.84mg/L (48h)(Crustaceans)	ErC ₅₀ : 37.5mg/L (96h)(Algae)
Malathion	LC ₅₀ : 0.28mg/L (96h)(Fish)	EC ₅₀ : 0.00215mg/L (48h)(Crustaceans)	No information available
Pentachlorophenol	LC ₅₀ : 0.19mg/L (96h)(Fish)	EC ₅₀ : 0.11mg/L (48h)(Crustaceans)	ErC ₅₀ : 0.4mg/L (96h)(Algae)
Lindane	LC ₅₀ : 0.0714mg/L (96h)(Fish)	EC ₅₀ : 0.58mg/L (48h)(Crustaceans)	ErC ₅₀ : 1.62mg/L (96h)(Algae)

Parathion-methyl	LC ₅₀ : 5.16mg/L (96h)(Fish)	EC ₅₀ : 0.0026mg/L (48h)(Crustaceans)	ErC ₅₀ : 11mg/L (96h)(Algae)
Ethyl acetate	LC ₅₀ : 230mg/L (96h)(Fish)	No information available	ErC ₅₀ : 2500mg/L (96h)(Algae)
Dichlorvos	LC ₅₀ : 1.32mg/L (96h)(Fish)	EC ₅₀ : 0.00028mg/L (48h)(Crustaceans)	No information available
Chlorpyrifos	LC ₅₀ : 0.0043mg/L (96h)(Fish)	EC ₅₀ : 0.000372mg/L (48h)(Crustaceans)	ErC ₅₀ : 0.76mg/L (96h)(Algae)
2,4,6-trichlorophenol	LC ₅₀ : 2.26mg/L (96h)(Fish)	EC ₅₀ : 3.67mg/L (48h)(Crustaceans)	ErC ₅₀ : 7.8mg/L (96h)(Algae)
Hexachlorobenzene	LC ₅₀ : 7.6mg/L (96h)(Fish)	No information available	No information available
Deltamethrin	LC ₅₀ : 0.00186mg/L (96h)(Fish)	EC ₅₀ : 0.000165mg/L (48h)(Crustaceans)	No information available
Chlorothalonil	LC ₅₀ : 0.041mg/L (96h)(Fish)	EC ₅₀ : 0.17mg/L (48h)(Crustaceans)	ErC ₅₀ : 0.1mg/L (96h)(Algae)
Parathion	LC ₅₀ : 1mg/L (96h)(Fish)	EC ₅₀ : 0.001mg/L (48h)(Crustaceans)	No information available
Heptachlor	LC ₅₀ : 0.018mg/L (96h)(Fish)	EC ₅₀ : 0.04mg/L (48h)(Crustaceans)	ErC ₅₀ : 0.0332mg/L (96h)(Algae)
Bis(2-ethylhexyl) phthalate	LC ₅₀ : 75mg/L (96h)(Fish)	EC ₅₀ : >100mg/L (48h)(Crustaceans)	ErC ₅₀ : >100mg/L (72h)(Algae)

Chronic aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
Pentachlorophenol	NOEC : 0.039mg/L(Fish)	NOEC : 0.046mg/L(Crustaceans)	NOEC : 0.10mg/L(Algae)
Bis(2-ethylhexyl) phthalate	No information available	NOEC : 10mg/L(Crustaceans)	NOEC : 100mg/L(Algae)

Persistence and degradability

Component	Persistence (water/soil)	Persistence (air)
Dichlorvos	High	High
2,4,6-trichlorophenol	High(Half-life = 1820.42 days)	Low(Half-life = 51.42 days)
Hexachlorobenzene	High(Half-life = 4178 days)	High(Half-life = 1563.75 days)
Dimethoate	Media(Half-life = 112 days)	Low(Half-life = 0.2 days)
Pentachlorophenol	High(Half-life = 1535 days)	Low(Half-life = 58 days)
Lindane	High(Half-life = 240.21 days)	Low(Half-life = 3.85 days)
Chlorothalonil	High	High
Parathion-methyl	High(Half-life = 360 days)	Low(Half-life = 0.44 days)
Heptachlor	Low(Half-life = 5.39 days)	Low(Half-life = 0.41 days)
Malathion	Media(Half-life = 103 days)	Low(Half-life = 0.41 days)
Chlorpyrifos	High	High
Parathion	High	High
Bis(2-ethylhexyl) phthalate	High(Half-life = 389 days)	Low(Half-life = 1.21 days)

Deltamethrin	High	High
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| Bioaccumulative potential

Component	Bioaccumulative potential	Comments
Dichlorvos	Low	Log Kow=1.47
2,4,6-trichlorophenol	High	BCF=12130
Hexachlorobenzene	High	BCF=575440
Dimethoate	Low	BCF=8
Pentachlorophenol	Low	BCF=198
Lindane	Medium	BCF=1400
Chlorothalonil	Low	BCF=125
Parathion-methyl	Low	BCF=71
Heptachlor	High	BCF=17300
Malathion	Low	BCF=119
Chlorpyrifos	High	BCF=2880
Parathion	Low	BCF=400
Bis(2-ethylhexyl) phthalate	High	BCF=24500
Deltamethrin	High	Log Kow=5.43

| Mobility in soil

Component	log Koc	Remark
Dichlorvos	1.604	
2,4,6-trichlorophenol	3.074	
Hexachlorobenzene	3.529	
Dimethoate	1.390	
Pentachlorophenol	3.529	
Lindane	3.529	
Chlorothalonil	3.55	
Parathion-methyl	2.718	
Heptachlor	4.719	
Malathion	1.484	
Chlorpyrifos	3.90119	20 °C , pH=6.6
Parathion	3.250	
Bis(2-ethylhexyl) phthalate	5.219	
Deltamethrin	5.033	

13 Disposal considerations

| Disposal considerations

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.

14 Transport information

| Label and Mark

Transporting Label	
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| IMDG-CODE

UN number	3021
UN proper shipping name	PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S. , flashpoint less than 23 °C
Transport hazard class	3
Transport subsidiary hazard class	6.1
Packing group	II
Marine pollutant (Yes or no)	No

| IATA-DGR

UN number	3021
UN proper shipping name	PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S., flash point less than 23 °C
Transport hazard class	3
Transport subsidiary hazard class	6.1
Packing group	II

| UN-ADR

UN number	3021
UN proper shipping name	PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S., flash point less than 23 °C
Transport hazard class	3
Transport subsidiary hazard class	6.1
Packing group	II

| Transport in bulk according to IMO instruments

◆ Transport in bulk according to Annex II of MARPOL and the IBC code

	Not Available
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◆ Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

	Not Available
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◆ Transport in bulk in accordance with the IGC Code

	Not Available
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Others

Precautions for transport	Transit should be anti-exposure, rain, high temperature. Strictly prohibited shipping or transportation with acids, alkalis, oxidants, food and food additives etc. Shipment of the goods vehicle exhaust pipe must be equipped with fire retardant devices, prohibit using mechanical equipment and tools of which easy to produce sparks. Transit should be anti-exposure, anti-rain, anti-high temperature. Transportation used tank (tank) cars should be grounded chain, tank can be installed to reduce the partition hole static electricity shocks. Strictly prohibited shipping or transportation with oxidants, acids, food and food additives etc. When bulk transport, Prohibit the use of cement or wooden boats. Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be placarded and marked in accordance with relevant transporting requirements.
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15 Regulatory information

International chemical inventory

Component	A	B	C	D	E	F	G	H	I	J	K	L	M
Ethyl acetate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dichlorvos	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✓	✓	✓
2,4,6-trichlorophenol	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓
Hexachlorobenzene	✓	✓	✓	✓	✗	✓	✗	✓	✓	✓	✓	✓	✓
Dimethoate	✓	✓	✓	✗	✓	✓	✓	✗	✓	✗	✓	✓	✓
Pentachlorophenol	✓	✓	✓	✓	✗	✓	✓	✗	✓	✗	✓	✓	✓
Lindane	✓	✓	✓	✓	✗	✓	✓	✗	✓	✗	✓	✓	✓
Chlorothalonil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓
Parathion-methyl	✓	✓	✗	✗	✗	✓	✓	✗	✗	✗	✓	✓	✓
Heptachlor	✓	✓	✗	✗	✗	✓	✓	✗	✓	✗	✓	✓	✓
Malathion	✓	✓	✗	✓	✓	✓	✓	✗	✓	✗	✓	✓	✓
Chlorpyrifos	✓	✓	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
Parathion	✓	✓	✗	✗	✗	✓	✓	✗	✗	✗	✓	✓	✓
o,p'-DDT	✓	✓	✗	✗	✓	✗	✗	✗	✗	✗	✗	✓	✓
Bis(2-ethylhexyl) phthalate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Deltamethrin	✓	✓	✗	✗	✓	✓	✓	✗	✗	✗	✓	✓	✓

- 【A】 China Inventory of Existing Chemical Substances(IECSC)
- 【B】 European Inventory of Existing Commercial Chemical Substances(EC inventory)
- 【C】 United States Toxic Substances Control Act Inventory(TSCA)
- 【D】 Canadian Domestic Substances List(DSL)
- 【E】 New Zealand Inventory of Chemicals(NZIoc)
- 【F】 Philippines Inventory of Chemicals and Chemical Substances(PICCS)
- 【G】 Korea Existing Chemicals Inventory(KECL)
- 【H】 Australian. Inventory of Industrial Chemical (AIICS)
- 【I】 Japan Inventory of Existing & New Chemical Substances(ENCS)
- 【J】 Thailand Existing Chemicals Inventory(TECI)

【K】 Mexico National Inventory of Chemical Substances (INSQ)
 【L】 Russia Inventory of Existing Substances (DRAFT)
 【M】 Inventory of Existing Chemical Substances in Taiwan, China (TCSI)

List of Chemical Substances under International Conventions

Component	A	B	C
Ethyl acetate	✗	✗	✗
Dichlorvos	✗	✗	✗
2,4,6-trichlorophenol	✗	✗	✗
Hexachlorobenzene	✗	✓	✓
Dimethoate	✗	✗	✗
Pentachlorophenol	✗	✓	✓
Lindane	✗	✓	✓
Chlorothalonil	✗	✗	✗
Parathion-methyl	✗	✗	✓
Heptachlor	✗	✓	✓
Malathion	✗	✗	✗
Chlorpyrifos	✗	✗	✗
Parathion	✗	✗	✓
o,p'-DDT	✗	✗	✗
Bis(2-ethylhexyl) phthalate	✗	✗	✗
Deltamethrin	✗	✗	✗

【A】 The Montreal Protocol on Substances that Deplete the Ozone Layer
 【B】 Stockholm Convention on Persistent Organic Pollutants (POPs)
 【C】 Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade

US chemical inventory

Component	A	B	C	D	E	F	G	H
Ethyl acetate	✗	✗	✓	✓	✓	✓	✓	✗
Dichlorvos	✓	✓	✓	✓	✓	✓	✓	✓
2,4,6-trichlorophenol	✓	✗	✓	✓	✓	✓	✓	✓
Hexachlorobenzene	✓	✗	✓	✓	✓	✓	✓	✓
Dimethoate	✗	✓	✓	✓	✓	✓	✓	✗
Pentachlorophenol	✓	✓	✓	✓	✓	✓	✓	✓
Lindane	✓	✓	✓	✓	✓	✓	✓	✗
Chlorothalonil	✗	✗	✗	✓	✓	✓	✓	✓
Parathion-methyl	✗	✓	✓	✓	✓	✓	✓	✗
Heptachlor	✓	✗	✓	✓	✓	✓	✓	✓
Malathion	✗	✗	✓	✓	✓	✓	✓	✓
Chlorpyrifos	✗	✗	✓	✓	✓	✓	✓	✓

Parathion	✓	✓	✓	✓	✓	✓	✓	✓
o,p'-DDT	✗	✗	✗	✗	✗	✗	✗	✓
Bis(2-ethylhexyl) phthalate	✓	✗	✓	✓	✓	✓	✓	✓
Deltamethrin	✗	✗	✗	✗	✗	✗	✗	✗

- [A] US Clean Air Act (CAA)- Section 112, Hazardous Air Pollutants
- [B] US SARA 302- Extremely Hazardous Substance List
- [C] US CERCLA- Hazardous Substances List
- [D] US Massachusetts Right-to-Know Substance List
- [E] US New Jersey Right to Know Hazardous Substance List
- [F] US Pennsylvania Right to Know Hazardous Substance List
- [G] US New York City Right-to-Know Hazardous Substance List
- [H] US California Proposition 65 List

Note:

- “✓” Indicates that the substance included in the regulations.
- “✗” No data or not included in the regulations.

16 Other information

Information on revision

Creation Date	2025/10/24
Revision Date	-
Reason for revision	-

Reference

- [1] IPCS: The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>.
- [2] IARC, website: <http://www.iarc.fr/>.
- [3] OECD: The Global Portal to Information on Chemical Substances, website: <https://www.echemportal.org/echemportal/>.
- [4] CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.
- [5] NLM: ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.
- [6] EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.
- [7] U.S. Department of Transportation: ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.
- [8] Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG-CODE	International Maritime Dangerous Goods CODE
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC ₅₀	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD ₅₀	Lethal Dose 50%	NTP	National Toxicology Program
EC ₅₀	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
EC _X	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
P _{ow}	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor	HCS	Hazard Communication Standard

Disclaimer

This Safety Data Sheet (SDS) was prepared according to OSHA HCS -2024. The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present

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