Safety Data Sheet

7 Mix organophosphorous in

dichloromethane

Version: V2.0.0.1

Report No.: BWN5631-2016-MSDS-US

Creation Date: 2025/11/08

Revision Date: -

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



1 Identification

| Product identifier

Product Name	7 Mix organophosphorous in dichloromethane
Cat No.	BWN5631-2016
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 p	hone number	010-58103678
-------------	-------------	--------------

2 Hazard(s) identification

Hazard classification according to 29 CFR 1910.1200

Carcinogenicity	Category	2
-----------------	----------	---

Label elements

Labercientis	
Hazard pictograms	
Signal word	Warning

| Hazard statements

H351	Suspected of causing cancer
Precautionary statements	

Prevention

P201	Obtain special instructions before use.	
P202	Do not handle until all safety precautions have been read and understood.	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.	

◆ Response

Response	Not applicable
----------	----------------

Storage

P405	Store	locked	up.
------	-------	--------	-----

Disposal

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

Version: V2.0.0.1 Revision Date: -

Other hazards

Not applicable.

Hazard description

Physical and chemical hazards

	No information available
Health hazards	

Inhaled	Dizziness. Drowsiness. Headache. Nausea. Weakness. Unconsciousness.	
	Death.	
Ingestion	Abdominal pain. (Further see Inhalation).	
Skin Contact	Dry skin. Redness. Burning sensation.	
Eye Redness. Pain. Severe deep burns.		

Environmental hazards

Please refer to 12th chapter of SDS.

Composition/information on ingredients

Substance/mixture

Mixture

Component CAS No.		EC No.	Concentration (wt, %)
Dichloromethane	75-09-2	200-838-9	99.93
Dichlorvos	62-73-7	200-547-7	0.01
Demeton-S	126-75-0	204-801-8	0.01
Trichlorfon	52-68-6	200-149-3	0.01
Dimethoate	60-51-5	200-480-3	0.01
Parathion	56-38-2	200-271-7	0.01
Malathion	121-75-5	204-497-7	0.01

Parathion-methyl	298-00-0	206-050-1	0.01

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 and then wash skin with water and soap.
Ingestion	Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Rest.
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

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

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 , water spray or regular foam; Large fire: water
	spray, fog or regular foam; Fire involving tanks: cool containers with flooding
	quantities of water until well after fire is out.
Unsuitable extinguishing media	Large fire: Do not scatter spilled material with high-pressure water streams.

Specific hazards arising from the substance or mixture

- 1 Development of hazardous combustion gases or vapor possible in the event of fire.
- 2 May expansion or decompose explosively when heated or involved in fire.

Special protective equipment and precautions for fire-fighters

- 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 Use personal protective equipment, do not breathe gas/mist/vapour/spray.
- Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
- 3 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 0	
1	Cut off the source of the leak as much as possible.
2	Keep leaks in a ventilated place.
3	Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
4	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.
5	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in

7 Handling and storage

| Precautions for safe handling

1	Handling is performed in a well ventilated place.
2	Wear suitable protective equipment.
3	Avoid contact with skin and eyes.
4	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.
4	Store away from incompatible materials and foodstuff containers.

8 Exposure controls/personal protection

| Control parameters

◆Occupational exposure limit values

Component	Country/Region	Limit value	- Eight hours	Limit value - Short term	
		ppm	mg/m³	ppm	mg/m³
Dichloromethane	Japan - JSOH(2024–202 5)	50	173	-	-
	Permissible exposure standards for workers in the workplace	50	174	75	217.5
	Australia	50	174	-	-
	Canada - Ontario	50	-	-	-
	European Union	100	353	200	706
	New Zealand	50	174	-	-
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	-	-
Trichlorfon	Japan - JSOH(2024–202 5)	-	0.2	-	-
	Canada - Ontario	-	1	-	-
	USA - ACGIH	-	0.1(inhalable fraction and vapor)	-	-
	Belgium	-	1	-	-
	Finland	-	0.5	-	-
	Poland	-	0.5	-	2
Dimethoate	Poland	-	0.2	-	0.6
	Romania	-	7	-	10
Parathion	Japan - JSOH(2024–202 5)	-	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	-	-
Malathion	Japan - JSOH(2024–202 5)	-	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)	-	-
Parathion-methyl	Permissible exposure standards for workers in the	-	0.2	-	0.6

workplace				
Canada - Ontario	-	0.02	-	-
USA - ACGIH	-	0.02(inhalable fraction and vapor)	-	-
USA - NIOSH	-	0.2	-	-
Austria	-	0.2	-	0.4
Belgium	-	0.02	-	-

| 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 appropriate chemical protective gloves.
Respiratory protection	Must wear appropriate personal respiratory protective equipment.
Skin and body protection	Must wear appropriate chemical protective clothing and chemical resistant shoes.

9 Physical and chemical properties and safety characteristics

| Physical and chemical properties

1 2	
Appearance (physical state, color, etc.)	clear or yellow liquid
Odor	No information available
Odor threshold	No information available
рН	No information available
Melting point/freezing point(°C)	-97 (Dichloromethane)
Initial boiling point and boiling range(°C)	40 (Dichloromethane)
Flash point(Closed cup,°C)	No information available
Evaporation rate	No information available
Flammability	No information available
Upper/lower explosive limits[%(v/v)]	Upper limit: 22 (Dichloromethane); Lower limit: 13 (Dichloromethane)
Vapor pressure	47.4kPa (20°C,Dichloromethane)
Vapor density(Air = 1)	2.9 (Dichloromethane)
Relative density(Water=1)	1.3 (20°C,Dichloromethane)
Solubility	20g/I (20°C, Dichloromethane)
n-octanol/water partition coefficient	1.25 (Dichloromethane)

Auto-ignition temperature(°C)	605 (Dichloromethane)
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	Reactions with metals form metal organic coumpounds.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	Metal, oxidantss and alkali.
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)
Trichlorfon	250mg/kg(Rat)	2000mg/kg(Rat)	No information available
Dichloromethane	1600mg/kg(Rat)	No information available	No information available
Malathion	2100mg/kg(Rat)	4100mg/kg(Rabbit)	> 5.2mg/L(Rat)
Dichlorvos	57~108mg/kg(Rat)	107mg/kg(Rabbit)	0.015mg/L(Rat)
Dimethoate	150mg/kg(Rat)	353mg/kg(Rat)	No information available
Demeton-S	1.5mg/kg(Rat)	No information available	No information available
Parathion-methyl	14mg/kg(Rat)	300mg/kg(Rabbit)	0.034mg/L(Rat)
Parathion	13mg/kg(Rat)	15mg/kg(Rabbit)	0.084mg/L(Rat)

| Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP	OSHA Carcinogen List
Dichloromethane	Category 2A	Category R	Listed
Dichlorvos	Category 2B	Not Listed	Not Listed
Demeton-S	Not Listed	Not Listed	Not Listed
Trichlorfon	Category 3	Not Listed	Not Listed
Dimethoate	Not Listed	Not Listed	Not Listed
Parathion	Category 2B	Not Listed	Not Listed
Malathion	Category 2A	Not Listed	Not Listed
Parathion-methyl	Category 3	Not Listed	Not Listed

Others

7 Mix organophosphorous in dichloromethane		
Skin corrosion/irritation	Based on available data, the classification criteria are not met	
Serious eye damage/irritation	Based on available data, the classification criteria are not met	
Skin sensitization	Based on available data, the classification criteria are not met	
Respiratory sensitization	Based on available data, the classification criteria are not met	
Reproductive toxicity	Based on available data, the classification criteria are not met	
STOT-single exposure	Based on available data, the classification criteria are not met	
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
Trichlorfon	LC ₅₀ : 1.82mg/L	EC ₅₀ : 0.00018mg/L	No information available
	(96h)(Fish)	(48h)(Crustaceans)	
Dichloromethane	LC ₅₀ :193mg/L (96h)(Fish)	EC ₅₀ : 1470mg/L	No information available
		(48h)(Crustaceans)	
Malathion	LC ₅₀ : 0.28mg/L	EC ₅₀ : 0.00215mg/L	No information available
	(96h)(Fish)	(48h)(Crustaceans)	
Dichlorvos	LC ₅₀ : 1.32mg/L	EC ₅₀ : 0.00028mg/L	No information available
	(96h)(Fish)	(48h)(Crustaceans)	
Dimethoate	LC ₅₀ : 7.65mg/L	EC ₅₀ : 0.84mg/L	ErC ₅₀ : 37.5mg/L
	(96h)(Fish)	(48h)(Crustaceans)	(96h)(Algae)
Parathion-methyl	LC ₅₀ : 5.16mg/L	EC ₅₀ : 0.0026mg/L	ErC ₅₀ : 11mg/L
	(96h)(Fish)	(48h)(Crustaceans)	(96h)(Algae)
Parathion	LC ₅₀ : 1mg/L (96h)(Fish)	EC ₅₀ : 0.001mg/L	No information available
		(48h)(Crustaceans)	

| Chronic aquatic toxicity

Chronic aquatic toxicity No information available

| Persistence and degradability

Component	Persistence (water/soil)	Persistence (air)
Dichlorvos	High	High
Trichlorfon	Low(Half-life = 45 days)	Low(Half-life = 4.21 days)
Dimethoate	Media(Half-life = 112 days)	Low(Half-life = 0.2 days)
Parathion	High	High
Malathion	Media(Half-life = 103 days)	Low(Half-life = 0.41 days)
Parathion-methyl	High(Half-life = 360 days)	Low(Half-life = 0.44 days)

| Bioaccumulative potential

Component Bioaccumulative potential	Comments
-------------------------------------	----------

Dichlorvos	Low	Log Kow=1.47
Trichlorfon	Low	Log Kow=0.48
Dimethoate	Low	BCF=8
Parathion	Low	BCF=400
Malathion	Low	BCF=119
Parathion-methyl	Low	BCF=71

Mobility in soil

Component	log Koc	Remark
Dichloromethane	1.67	20 ℃
Dichlorvos	1.604	
Trichlorfon	1.731	
Dimethoate	1.390	
Parathion	3.250	
Malathion	1.484	
Parathion-methyl	2.718	

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.

Transport information

| Label and Mark

Transporting Label



IMDG-CODE

UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class	9
Transport subsidiary hazard	None
class	
Packing group	ш
Marine pollutant (Yes or no)	No

IATA-DGR

UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class	9
Transport subsidiary hazard	None
class	
Packing group	ш

UN-ADR

UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class	9
Transport subsidiary hazard	None
class	
Packing group	ш

Transport in bulk according to IMO instruments

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

Not Available

◆ Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Not Available

◆ Transport in bulk in accordance with the IGC Code

Not Available

Others

Precautions	for	transport
-------------	-----	-----------

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.

Version: V2.0.0.1 Revision Date: -

15 Regulatory information

International chemical inventory

Component	Α	В	С	D	E	F	G	Н	ı	J	K	L	М
Dichloromethane	√	√	√	√	√	√	√	√	√	√	√	√	√
Dichlorvos	√	V	√	√	V	√	√	×	√	×	√	√	V
Demeton-S	×	√	×	×	×	×	×	×	×	×	×	×	×
Trichlorfon	√	√	×	√	√	√	√	√	×	×	√	√	√
Dimethoate	√	√	√	×	√	√	√	×	√	×	√	√	√
Parathion	√	√	×	×	×	√	√	×	×	×	√	√	√
Malathion	√	√	×	√	√	√	√	×	√	×	√	√	√
Parathion-methyl	√	√	×	×	×	√	√	×	×	×	√	√	√

- [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)
- [1] 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	В	С
Dichloromethane	×	×	×
Dichlorvos	×	×	×
Demeton-S	×	×	×
Trichlorfon	×	×	V
Dimethoate	×	×	×
Parathion	×	×	V
Malathion	×	×	×
Parathion-methyl	×	×	V

- [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	Α	В	С	D	E	F	G	Н
Dichloromethane	V	×	√	√	√	√	√	√
Dichlorvos	√	√	√	√	√	√	√	√
Demeton-S	×	×	×	×	×	×	×	×
Trichlorfon	×	√	√	√	√	√	√	×
Dimethoate	×	√	√	√	√	√	√	×
Parathion	V	√	√	√	√	√	√	1
Malathion	×	×	√	√	√	√	√	√
Parathion-methyl	×	√	V	√	V	V	√	×

- [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:

- " $\sqrt{}$ " Indicates that the substance included in the regulations.
- "x" No data or not included in the regulations.

Version: V2.0.0.1 Revision Date: -

16 Other information

Information on revision

Creation Date	2025/11/08
Revision Date	-
Reason for revision	-

Version: V2.0.0.1 Revision Date: -

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.
- EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/. [6]
- [7] U.S. Department of Transportation: ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg.
- Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.de/. [8]

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
Pow	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 state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.