Custom Pesticides Mix 2-OP

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 18/08/2017 Revision date: : Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	:	Mixture
Product name	:	Custom Pesticides Mix 2-OP
Product code	:	AL0-130140
Product group	:	Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category	:	Laboratory Use
Industrial/Professional use spec	:	Industrial For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Phenova
6390 Joyce Dr. Suite 100
80403 Golden, CO - United States
T 1-866-942-2978 - F 1-866-283-0269
info@phenova.com - www.phenova.com

1.4. Emergency telephone number

Emergency number	:	ChemTel Assistance (US/Canada) 1-800-255-3924 ChemTel Assistance (International) +1 813-248-0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2	H225
Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Dermal)	H312
Acute Tox. 4 (Inhalation)	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 3	H336
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11
Xn; R20/21/22
Xi; R36/38
N; R50/53
R5

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS07 GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapor
H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water
P304+P340 - IF INHALED: Remove person to fresh air and keep 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
P308+P313 - IF exposed or concerned: Get medical advice/attention
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P370+P378 - In case of fire: Use media other than water to extinguish
P391 - Collect spillage
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

EUH phrases : EUH208 - Contains chlorpyrifos-methyl(5598-13-0), malathion(121-75-5). May produce an allergic reaction

No labeling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethyl acetate (Component)	(CAS No) 141-78-6 (EC-No.) 205-500-4 (EC index no) 607-022-00-5	50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
cyclohexane (Component)	(CAS No) 110-82-7 (EC-No.) 203-806-2 (EC index no) 601-017-00-1	47.8	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
carbophenothion (Component)	(CAS No) 786-19-6 (EC-No.) 212-324-1 (EC index no) 015-044-00-6	0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 1 (Dermal), H310 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
chlorpyrifos (Component)	(CAS No) 2921-88-2 (EC-No.) 220-864-4 (EC index no) 015-084-00-4	0.2	Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
chlorpyrifos-methyl (Component)	(CAS No) 5598-13-0 (EC-No.) 227-011-5 (EC index no) 015-186-00-9	0.2	Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10000) Aquatic Chronic 1, H410

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
diazinon (Component)	(CAS No) 333-41-5 (EC-No.) 206-373-8 (EC index no) 015-040-00-4	0.2	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410
ethion (Component)	(CAS No) 563-12-2 (EC-No.) 209-242-3 (EC index no) 015-047-00-2	0.2	Acute Tox. 2 (Oral), H300 Acute Tox. 3 (Dermal), H311 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Ronnel (Component)	(CAS No) 299-84-3 (EC-No.) 206-082-6 (EC index no) 015-052-00-X	0.2	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
fonofos (Component)	(CAS No) 944-22-9 (EC-No.) 213-408-0 (EC index no) 015-091-00-2	0.2	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
malathion (Component)	(CAS No) 121-75-5 (EC-No.) 204-497-7 (EC index no) 015-041-00-X	0.2	Acute Tox. 3 (Oral), H301 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410
methyl parathion (Component)	(CAS No) 298-00-0 (EC-No.) 206-050-1 (EC index no) 015-035-00-7	0.2	Flam. Liq. 3, H226 Acute Tox. 2 (Oral), H300 Acute Tox. 2 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 STOT RE 2, H373 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410
parathion (Component)	(CAS No) 56-38-2 (EC-No.) 200-271-7 (EC index no) 015-034-00-1	0.2	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 STOT RE 1, H372 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410
Tetrachlorvinphos (Component)	(CAS No) 22248-79-9 (EC-No.) 244-865-4	0.2	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 (M=100)

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a poison center or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Consult a doctor/medical service. Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. Causes skin irritation.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor.

Explosion hazard : May form flammable/explosive vapor-air mixture. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Heating may cause an explosion.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. DO NOT fight fire when fire reaches explosives. Evacuate area.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapors/spray.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up in absorbent material. Collect spillage.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable. Hazardous waste due to potential risk of explosion.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Keep away from sources of ignition - No smoking.

Hygiene measures : Do not eat, drink or smoke when using this product. Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.

Storage conditions : Keep in fireproof place. Keep container tightly closed. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.

Incompatible materials : Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Either local exhaust or general room ventilation is usually required.

Personal protective equipment : Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.

Hand protection : Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.

Eye protection : Chemical goggles or safety glasses. Safety glasses.

Skin and body protection : Wear suitable protective clothing. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Colorless.
Odor	:	characteristic.
pH	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Highly flammable liquid and vapor
Relative density	:	No data available
Solubility	:	No data available
Explosive properties	:	Heating may cause an explosion.
Oxidizing properties	:	No data available
Explosion limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture. Heating may cause an explosion. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Heat. Sparks. Overheating.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation: Harmful if inhaled.

Custom Pesticides Mix 2-OP	
ATE CLP (oral)	453.4405292753 mg/kg body weight
ATE CLP (dermal)	1100 mg/kg body weight
ATE CLP (gases)	4500 ppmV/4h
ATE CLP (vapors)	11 mg/l/4h
ATE CLP (dust, mist)	1.5 mg/l/4h

carbophenothion (786-19-6)	
LD50 oral rat	20 - 79 mg/kg (Rat)
LD50 dermal rat	27 mg/kg (Rat)
LD50 dermal rabbit	1270 mg/kg (Rabbit)
ATE CLP (oral)	20 mg/kg body weight
ATE CLP (dermal)	27 mg/kg body weight

chlorpyrifos (2921-88-2)	
LD50 oral rat	82 mg/kg (Rat)
ATE CLP (oral)	82 mg/kg body weight

chlorpyrifos-methyl (5598-13-0)	
LD50 oral rat	> 1500 mg/kg (Rat)

chlorpyrifos-methyl (5598-13-0)	
LD50 dermal rat	3713 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 0.67 mg/l/4h (Rat)

diazinon (333-41-5)	
LD50 oral rat	> 300 mg/kg (Rat)
ATE CLP (oral)	500 mg/kg body weight

ethion (563-12-2)	
LD50 oral rat	27 mg/kg (Rat)
LD50 dermal rabbit	915 mg/kg (Rabbit)
ATE CLP (oral)	27 mg/kg body weight
ATE CLP (dermal)	915 mg/kg body weight

Ronnel (299-84-3)	
LD50 oral rat	625 mg/kg (Rat)
LD50 dermal rat	2000 mg/kg (Rat)
LD50 dermal rabbit	1000 mg/kg (Rabbit)
ATE CLP (oral)	625 mg/kg body weight
ATE CLP (dermal)	1000 mg/kg body weight

fonofos (944-22-9)	
LD50 oral rat	3 mg/kg (Rat)
LD50 dermal rat	147 mg/kg (Rat)
LD50 dermal rabbit	25 mg/kg (Rabbit)
ATE CLP (oral)	3 mg/kg body weight
ATE CLP (dermal)	25 mg/kg body weight

malathion (121-75-5)	
LD50 oral rat	290 mg/kg (Rat)
LD50 dermal rat	4444 mg/kg (Rat)
LD50 dermal rabbit	4100 mg/kg (Rabbit)
ATE CLP (oral)	290 mg/kg body weight
ATE CLP (dermal)	4100 mg/kg body weight

methyl parathion (298-00-0)	
LD50 oral rat	6 mg/kg (Rat)
LD50 dermal rat	67 mg/kg (Rat)
LD50 dermal rabbit	300 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	0.034 mg/l/4h (Rat)
ATE CLP (oral)	6 mg/kg body weight
ATE CLP (dermal)	67 mg/kg body weight
ATE CLP (gases)	100 ppmV/4h
ATE CLP (vapors)	0.034 mg/l/4h
ATE CLP (dust, mist)	0.034 mg/l/4h

parathion (56-38-2)	
LD50 oral rat	2 mg/kg (Rat)
LD50 dermal rat	73 mg/kg (Rat)
LD50 dermal rabbit	40 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	0.03 mg/l/4h (Rat)
ATE CLP (oral)	2 mg/kg body weight
ATE CLP (dermal)	40 mg/kg body weight
ATE CLP (gases)	100 ppmV/4h
ATE CLP (vapors)	0.03 mg/l/4h
ATE CLP (dust, mist)	0.03 mg/l/4h

Tetrachlorvinphos (22248-79-9)	
LD50 oral rat	480 mg/kg
LD50 dermal rabbit	> 2500 mg/kg
ATE CLP (oral)	480 mg/kg body weight

ethyl acetate (141-78-6)	
LD50 oral rat	5620 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 10200 mg/kg bodyweight; Rat)

ethyl acetate (141-78-6)	
LD50 dermal rabbit	> 18000 mg/kg (Rabbit; Experimental value; 24 hour cuff method; >20000 mg/kg bodyweight; Rabbit)
LC50 inhalation rat (mg/l)	70.56 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	19600 ppm/4h (Rat)
ATE CLP (oral)	5620 mg/kg body weight
ATE CLP (gases)	19600 ppmV/4h
ATE CLP (vapors)	70.56 mg/l/4h
ATE CLP (dust, mist)	70.56 mg/l/4h

cyclohexane (110-82-7)	
LD50 oral rat	> 12705 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; >5000 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 2000 mg/kg body weight (Rabbit; Experimental value; Equivalent or similar to OECD 402)
LC50 inhalation rat (mg/l)	> 19.07 mg/l/4h (Rat; Experimental value)
LC50 inhalation rat (ppm)	> 5540 ppm/4h (Rat)

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.
Based on available data, the classification criteria are not met

Respiratory or skin sensitization : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
Based on available data, the classification criteria are not met
May cause cancer

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity – single exposure : May cause drowsiness or dizziness.

Specific target organ toxicity – repeated exposure : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

Potential Adverse human health effects and symptoms : Harmful if swallowed. Harmful in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

carbophenothion (786-19-6)	
LC50 fish 1	0.013 mg/l (LC50; 96 h; Lepomis macrochirus)
EC50 Daphnia 1	0.08 mg/l (LC50; 48 h)
Threshold limit algae 1	0.1 - 0.35,EC50; 96 h

chlorpyrifos (2921-88-2)	
LC50 fish 2	0.003 mg/l (LC50; 96 h)
LC50 other aquatic organisms 2	0.0017 mg/l (Daphnia magna)
Threshold limit algae 1	0.228 mg/l (EC50; 96 h)

chlorpyrifos-methyl (5598-13-0)	
LC50 fish 1	0.301 mg/l (LC50; 96 h)
EC50 Daphnia 1	0.00062 mg/l (EC50; 48 h)

diazinon (333-41-5)	
LC50 fish 1	0.09 mg/l (LC50; 96 h)
EC50 Daphnia 1	0.00096 mg/l (EC50; 48 h)
EC50 other aquatic organisms 1	17.3 mg/l (120 h; Scenedesmus subspicatus; Growth rate)

fonofos (944-22-9)	
LC50 fish 2	0.02 mg/l (LC50; 96 h)

malathion (121-75-5)	
EC50 Daphnia 1	0.0008 mg/l (EC50; 48 h)

malathion (121-75-5)	
LC50 fish 2	0.17 mg/l (LC50; 96 h)

methyl parathion (298-00-0)	
LC50 fish 1	2.7 - 3.7 mg/l (LC50; 96 h)
EC50 Daphnia 1	0.00014 mg/l (EC50; 48 h)

parathion (56-38-2)	
EC50 Daphnia 1	0.0025 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna)
LC50 fish 2	0.75 mg/l (LC50; 96 h)

Tetrachlorvinphos (22248-79-9)	
LC50 fish 1	0.5 mg/l Lepomis macrochirus
EC50 Daphnia 1	0.002 mg/l 48 h

ethyl acetate (141-78-6)	
LC50 fish 2	230 mg/l (LC50; US EPA; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 2	154 mg/l (EC50; 48 h; Daphnia magna)

cyclohexane (110-82-7)	
LC50 fish 1	4.53 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 1	0.9 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	3.428 mg/l (EbC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum)
Threshold limit algae 2	0.925 mg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum)

12.2. Persistence and degradability

Custom Pesticides Mix 2-OP	
Persistence and degradability	May cause long-term adverse effects in the environment.

carbophenothion (786-19-6)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil.

chlorpyrifos (2921-88-2)	
Persistence and degradability	Not readily biodegradable in water.

chlorpyrifos-methyl (5598-13-0)	
Persistence and degradability	Not readily biodegradable in water.

diazinon (333-41-5)	
Persistence and degradability	Not readily biodegradable in water.

malathion (121-75-5)	
Persistence and degradability	Biodegradable in the soil.

methyl parathion (298-00-0)	
Persistence and degradability	Not readily biodegradable in water. Adsorbs into the soil. Photolysis in the air.

parathion (56-38-2)	
Persistence and degradability	Biodegradable in water. Forming sediments in water. Biodegradable in the soil. Adsorbs into the soil.

ethyl acetate (141-78-6)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	0.293 g O□ /g substance
Chemical oxygen demand (COD)	1.69 g O□ /g substance
ThOD	1.82 g O□ /g substance

cyclohexane (110-82-7)	
Persistence and degradability	Readily biodegradable in water. Non degradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	0.22 g O□ /g substance
ThOD	3.425 g O□ /gsubstance
BOD (% of ThOD)	< 0.5 (Literature study)

12.3. Bioaccumulative potential

Custom Pesticides Mix 2-OP	
Bioaccumulative potential	Not established.

carbophenothion (786-19-6)	
Log Pow	5.33
Bioaccumulative potential	Bioaccumable.

chlorpyrifos (2921-88-2)	
BCF fish 1	1700 (BCF)
BCF fish 2	49 - 2880 (BCF)
BCF other aquatic organisms 1	1 - 10 mg/l (BCF; 120 h; Algae)
Log Pow	4.82 - 5.27
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

chlorpyrifos-methyl (5598-13-0)	
BCF fish 1	802 (BCF)
BCF other aquatic organisms 1	1800 (BCF)
Log Pow	4.2
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

diazinon (333-41-5)	
BCF fish 1	7 - 46.9 (BCF)
BCF fish 2	470 - 540 (BCF; 672 h)
Log Pow	3.3 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

ethion (563-12-2)	
Log Pow	5.07
Bioaccumulative potential	Not bioaccumulative.

Ronnel (299-84-3)	
Log Pow	4.88

fonofos (944-22-9)	
Log Pow	3.94

malathion (121-75-5)	
Log Pow	2.36 - 2.89
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

methyl parathion (298-00-0)	
Log Pow	2.86
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

parathion (56-38-2)	
BCF fish 1	335 (BCF; 912 h)
BCF fish 2	462 (BCF; 72 h)
BCF other aquatic organisms 1	240 (BCF; 999 h)
BCF other aquatic organisms 2	97 (BCF; 792 h)
Log Pow	3.8
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

ethyl acetate (141-78-6)	
BCF fish 1	30 (BCF; 3 days; Leuciscus idus; Static system)
Log Pow	0.68 (Experimental value; EPA OPPTS 830.7560; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

cyclohexane (110-82-7)	
BCF fish 2	31 - 129 (BCF; 8 weeks; Cyprinus carpio)
Log Pow	3.44 (Experimental value; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

carbophenothion (786-19-6)	
Ecology - soil	Toxic to flora. Not toxic to bees.

chlorpyrifos (2921-88-2)	
Ecology - soil	Toxic to bees. May be harmful to plant growth, blooming and fruit formation.

chlorpyrifos-methyl (5598-13-0)	
Ecology - soil	Not toxic to plants. Toxic to bees.

ethion (563-12-2)	
Ecology - soil	Toxic to bees.

Ronnel (299-84-3)	
Ecology - soil	Not toxic to bees.

fonofos (944-22-9)	
Ecology - soil	Not toxic to plants. Toxic to bees.

malathion (121-75-5)	
Surface tension	0.037 N/m (24 °C)
Ecology - soil	Toxic to bees. Not toxic to plants.

methyl parathion (298-00-0)	
Ecology - soil	Not toxic to plants. Toxic to bees.

parathion (56-38-2)	
Surface tension	0.039 N/m (25 °C)
Ecology - soil	Toxic to bees.

ethyl acetate (141-78-6)	
Surface tension	0.024 N/m (20 °C)

cyclohexane (110-82-7)	
Surface tension	0.025 N/m (20 °C)
Log Koc	log Koc,Other; 2.89; QSAR; Koc; Other; 770; QSAR

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapors are flammable. Hazardous waste due to potential risk of explosion.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1993

UN-No. (IATA) : 1993

UN-No. (IMDG) : 1993

UN-No. (ADN) : 1993

14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, N.O.S.

Proper Shipping Name (IATA) : Flammable liquid, n.o.s.

Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S.

Proper Shipping Name (ADN) : FLAMMABLE LIQUID, N.O.S.

Transport document description (ADR) : UN 1993 FLAMMABLE LIQUID, N.O.S., 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS

14.3. Packing group

Class (ADR) : 3

Classification code (ADR) : F1

Class (IATA) : 3

Class (IMDG) : 3

Class (ADN) : 3

Classification code (ADN) : F1

Hazard labels (ADR) : 3

Hazard labels (IATA) : 3

Hazard labels (IMDG) : 3

Hazard labels (ADN) : 3

14.4. Packing group

Packing group (ADR) : II
Packing group (IATA) : II
Packing group (IMDG) : II
Packing group (ADN) : II

14.5. Environmental hazards

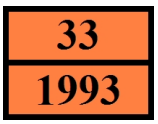
Dangerous for the environment :

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 33
Classification code (ADR) : F1
Orange plates :



Special provision (ADR) : 274, 601, 640D
Transport category (ADR) : 2
Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 1l
Excepted quantities (ADR) : E2

14.6.2. Transport by sea

Special provision (IMDG) : 274
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP1, TP8, TP28
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E
Stowage category (IMDG) : B

14.6.3. Air transport

CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
PCA packing instructions (IATA) : 353
PCA Limited quantities (IATA) : Y341

PCA limited quantity max net quantity (IATA)	:	1L
PCA max net quantity (IATA)	:	5L
PCA Excepted quantities (IATA)	:	E2
Special provision (IATA)	:	A3
ERG code (IATA)	:	3H

14.6.4. Inland waterway transport

Special provision (ADN)	:	274, 601, 640D
Limited quantities (ADN)	:	1 L
Excepted quantities (ADN)	:	E2
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EX, A
Ventilation (ADN)	:	VE01
Number of blue cones/lights (ADN)	:	1
Carriage prohibited (ADN)	:	No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources	:	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	:	None.

PHV SDS EU