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

1.1. Product identifier

Product form	:	Mixture
Product name	:	8141 NPD Mix
Product code	:	AL0-130062
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
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Repr. 2	H361
STOT SE 3	H336
STOT RE 2	H373
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

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

Repr.Cat.3; R62
F; R11
Xn; R48/20
Xi; R36/38
N; R50/53
R5
R67

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 GHS08 GHS09

Signal word (CLP) : Danger

Hazardous ingredients : hexane; acetone

Hazard statements (CLP) : H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
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
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
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
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
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
P362+P364 - Take off contaminated clothing and wash it before reuse
P391 - Collect spillage
P403+P235 - Store in a well-ventilated place. Keep cool

No labeling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hexane (Component)	(CAS No) 110-54-3 (EC no) 203-777-6 (EC index no) 601-037-00-0	79.8	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361f STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
acetone (Component)	(CAS No) 67-64-1 (EC no) 200-662-2 (EC index no) 606-001-00-8	20	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
terbufos (Component)	(CAS No) 13071-79-9 (EC no) 235-963-8 (EC index no) 015-139-00-2	0.01	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
parathion (Component)	(CAS No) 56-38-2 (EC no) 200-271-7 (EC index no) 015-034-00-1	0.01	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
methyl parathion (Component)	(CAS No) 298-00-0 (EC no) 206-050-1 (EC index no) 015-035-00-7	0.01	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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
malathion (Component)	(CAS No) 121-75-5 (EC no) 204-497-7 (EC index no) 015-041-00-X	0.01	Acute Tox. 3 (Oral), H301 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410
diazinon (Component)	(CAS No) 333-41-5 (EC no) 206-373-8 (EC index no) 015-040-00-4	0.01	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410
chlorpyrifos-methyl (Component)	(CAS No) 5598-13-0 (EC no) 227-011-5 (EC index no) 015-186-00-9	0.01	Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10000) Aquatic Chronic 1, H410
azinphos-methyl (Component)	(CAS No) 86-50-0 (EC no) 201-676-1 (EC index no) 015-039-00-9	0.01	Acute Tox. 2 (Oral), H300 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation), H330 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410
chlorpyrifos (Component)	(CAS No) 2921-88-2 (EC no) 220-864-4 (EC index no) 015-084-00-4	0.01	Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
dichlorvos (Component)	(CAS No) 62-73-7 (EC no) 200-547-7 (EC index no) 015-019-00-X	0.01	Acute Tox. 2 (Oral), H300 Acute Tox. 2 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10000)
disulfoton (Component)	(CAS No) 298-04-4 (EC no) 206-054-3 (EC index no) 015-060-00-3	0.01	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
naled (Component)	(CAS No) 300-76-5 (EC no) 206-098-3 (EC index no) 015-055-00-6	0.01	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=1000)
phorate (Component)	(CAS No) 298-02-2 (EC no) 206-052-2 (EC index no) 015-033-00-6	0.01	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Tetrachlorvinphos (Component)	(CAS No) 22248-79-9 (EC no) 244-865-4	0.01	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 (M=100)

Name	Product identifier	Specific concentration limits
hexane (Component)	(CAS No) 110-54-3 (EC no) 203-777-6 (EC index no) 601-037-00-0	(C >= 5) STOT RE 2, H373

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. Wash with plenty of soap and water. Wash contaminated clothing before reuse. Get medical advice/attention.

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

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

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

Symptoms/injuries after skin contact : Causes skin irritation.

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. 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 sources of ignition - No smoking.

Hygiene measures : 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 : Not classified

azinphos-methyl (86-50-0)	
LD50 oral rat	10 mg/kg (Rat)
LD50 dermal rat	150 - 220 mg/kg (Rat)
LC50 inhalation rat (mg/l)	0.15 mg/l/4h (Rat)
ATE CLP (oral)	10.000 mg/kg body weight
ATE CLP (dermal)	150.000 mg/kg body weight
ATE CLP (gases)	100.000 ppmV/4h
ATE CLP (vapors)	0.150 mg/l/4h
ATE CLP (dust, mist)	0.150 mg/l/4h

chlorpyrifos (2921-88-2)	
LD50 oral rat	82 mg/kg (Rat)
ATE CLP (oral)	82.000 mg/kg body weight

chlorpyrifos-methyl (5598-13-0)	
LD50 oral rat	> 1500 mg/kg (Rat)
LD50 dermal rat	3713 mg/kg (Rat)

chlorpyrifos-methyl (5598-13-0)	
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)	500.000 mg/kg body weight

dichlorvos (62-73-7)	
LD50 oral rat	25 mg/kg (Rat)
LD50 dermal rat	70 mg/kg (Rat)
LD50 dermal rabbit	107 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	0.015 mg/l/4h (Rat)
ATE CLP (oral)	25.000 mg/kg body weight
ATE CLP (dermal)	70.000 mg/kg body weight
ATE CLP (gases)	100.000 ppmV/4h
ATE CLP (vapors)	0.015 mg/l/4h
ATE CLP (dust, mist)	0.015 mg/l/4h

disulfoton (298-04-4)	
LD50 oral rat	2.6 mg/kg (Rat)
LD50 dermal rat	6 mg/kg (Rat)
ATE CLP (oral)	2.600 mg/kg body weight
ATE CLP (dermal)	6.000 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)	290.000 mg/kg body weight
ATE CLP (dermal)	4100.000 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)	6.000 mg/kg body weight
ATE CLP (dermal)	67.000 mg/kg body weight
ATE CLP (gases)	100.000 ppmV/4h
ATE CLP (vapors)	0.034 mg/l/4h
ATE CLP (dust, mist)	0.034 mg/l/4h

naled (300-76-5)	
LD50 oral rat	430 mg/kg (Rat)
LD50 dermal rabbit	800 mg/kg (Rabbit)
ATE CLP (oral)	430.000 mg/kg body weight
ATE CLP (dermal)	800.000 mg/kg body weight

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)	2.000 mg/kg body weight
ATE CLP (dermal)	40.000 mg/kg body weight
ATE CLP (gases)	100.000 ppmV/4h
ATE CLP (vapors)	0.030 mg/l/4h
ATE CLP (dust, mist)	0.030 mg/l/4h

phorate (298-02-2)	
LD50 oral rat	1 mg/kg (Rat)
LD50 dermal rat	6.2 mg/kg (Rat)
LD50 dermal rabbit	99 mg/kg (Rabbit)
ATE CLP (oral)	1.000 mg/kg body weight
ATE CLP (dermal)	6.200 mg/kg body weight

Tetrachlorvinphos (22248-79-9)	
LD50 oral rat	480 mg/kg
LD50 dermal rabbit	> 2500 mg/kg
ATE CLP (oral)	480.000 mg/kg body weight

terbufos (13071-79-9)	
LD50 oral rat	4.5 mg/kg (Rat)
LD50 dermal rat	7.4 mg/kg (Rat)
LD50 dermal rabbit	1.1 mg/kg (Rabbit)
ATE CLP (oral)	4.500 mg/kg body weight
ATE CLP (dermal)	1.100 mg/kg body weight

acetone (67-64-1)	
LD50 oral rat	5800 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	20000 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; >7426 mg/kg bodyweight; Rabbit; Weight of evidence)
LC50 inhalation rat (mg/l)	71 mg/l/4h (Rat; Experimental value; 76 mg/l/4h; Rat; Experimental value)
LC50 inhalation rat (ppm)	30000 ppm/4h (Rat; Experimental value)
ATE CLP (oral)	5800.000 mg/kg body weight
ATE CLP (dermal)	20000.000 mg/kg body weight
ATE CLP (gases)	30000.000 ppmV/4h
ATE CLP (vapors)	71.000 mg/l/4h
ATE CLP (dust, mist)	71.000 mg/l/4h

hexane (110-54-3)	
LD50 oral rat	16000 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	> 3350 mg/kg body weight (Rabbit; Read-across; Equivalent or similar to OECD 402)
ATE CLP (oral)	16000.000 mg/kg body weight

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 : Suspected of damaging fertility or the unborn child.

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

Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure.

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

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

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

azinphos-methyl (86-50-0)	
LC50 fish 1	0.004 mg/l (LC50; 96 h)
EC50 Daphnia 1	0.003 mg/l (EC50; 48 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	0.090 mg/l (LC50; 96 h)

diazinon (333-41-5)	
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)

dichlorvos (62-73-7)	
LC50 fish 1	0.0116 mg/l (LC50; 96 h)
LC50 fish 2	0.869 mg/l (LC50; 96 h)
EC50 Daphnia 2	0.00002 mg/l (EC50; 48 h)
Threshold limit algae 1	3.5 mg/l (EC50; 72 h)

disulfoton (298-04-4)	
LC50 fish 1	0.039 mg/l (LC50; 96 h)

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

naled (300-76-5)	
LC50 fish 1	2.2 mg/l (LC50; 96 h)
EC50 other aquatic organisms 1	0.00035 mg/l (48 h; Daphnia pulex)
EC50 other aquatic organisms 2	0.0011 mg/l (96 h; Simocephalus serrulatis)

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

acetone (67-64-1)	
LC50 fish 2	5540 mg/l (LC50; EU Method C.1; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value)
EC50 Daphnia 2	12600 mg/l (LC50; Other; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)

hexane (110-54-3)	
LC50 fish 1	2.5 mg/l (LC50; 96 h)
EC50 Daphnia 1	2.1 mg/l (EC50; 48 h)
Threshold limit algae 2	26 mg/l (EbC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system)

12.2. Persistence and degradability

8141 NPD Mix	
Persistence and degradability	May cause long-term adverse effects in the environment.

azinphos-methyl (86-50-0)	
Persistence and degradability	Not readily biodegradable in water.

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.

dichlorvos (62-73-7)	
Persistence and degradability	Biodegradable in water. Biodegradable in the soil.

disulfoton (298-04-4)	
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.

naled (300-76-5)	
Persistence and degradability	Biodegradability in water: no data available. Biodegradable in the soil.

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

phorate (298-02-2)	
Persistence and degradability	Biodegradability in soil: no data available.

terbufos (13071-79-9)	
Persistence and degradability	Biodegradable in the soil.

acetone (67-64-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	1.43 g O□ /g substance
Chemical oxygen demand (COD)	1.92 g O□ /g substance
ThOD	2.20 g O□ /g substance
BOD (% of ThOD)	0.872 (20 days; Literature study)

hexane (110-54-3)	
Persistence and degradability	Readily biodegradable in water. Photooxidation in water. easily degradable in the soil.
ThOD	3.52 g O□ /g substance
BOD (% of ThOD)	0.63 (Literature study)

12.3. Bioaccumulative potential

8141 NPD Mix	
Bioaccumulative potential	Not established.

azinphos-methyl (86-50-0)	
Log Pow	2.99
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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).

dichlorvos (62-73-7)	
Log Pow	1.4 - 2.03
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

disulfoton (298-04-4)	
Log Pow	3.81 (QSAR)
Bioaccumulative potential	Bioaccumable.

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).

naled (300-76-5)	
Bioaccumulative potential	No bioaccumulation data available.

parathion (56-38-2)	
BCF fish 1	335 (BCF; 912 h)

parathion (56-38-2)	
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).

terbufos (13071-79-9)	
Bioaccumulative potential	Not bioaccumulative.

acetone (67-64-1)	
BCF fish 1	0.69 (BCF)
BCF other aquatic organisms 1	3 (BCF; BCFWIN)
Log Pow	-0.24 (Test data)
Bioaccumulative potential	Not bioaccumulative.

hexane (110-54-3)	
BCF fish 1	501.187 (BCF; Other; Pimephales promelas)
Log Pow	3.5 - 3.94 (Calculated)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

12.4. Mobility in soil

azinphos-methyl (86-50-0)	
Ecology - soil	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.

dichlorvos (62-73-7)	
Ecology - soil	Toxic to bees.

disulfoton (298-04-4)	
Ecology - soil	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.

naled (300-76-5)	
Ecology - soil	Toxic to bees.

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

phorate (298-02-2)	
Ecology - soil	Toxic to bees.

terbufos (13071-79-9)	
Ecology - soil	Not toxic to plants. Not toxic to bees in normal conditions of use.

acetone (67-64-1)	
Surface tension	0.0237 N/m

hexane (110-54-3)	
Surface tension	0.018 N/m (25 °C; 1 g/l)
Log Koc	Koc,2187.76; QSAR; log Koc; 3.34; 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

Waste 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

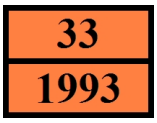
Dangerous for the environment :

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 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