

#### Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 08/04/2014 Revision date: 10/04/2015 : Version: 1.1

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

1.1. Product identifier

Product form : Mixture

Product name : Appendix IX Mix 2
Product code : AL0-101237
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

Use of the substance/mixture : Certified reference material for laboratory 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]

Acute Tox. 4 (Oral) H302
Acute Tox. 4 (Dermal) H312
Acute Tox. 4 (Inhalation) H332
Carc. 1A H350
Aquatic Chronic 3 H412

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

Carc.Cat.1; R45

F; R11 E; R3

Xn; R20/21/22

R52/53

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)





GHS07 GHS08

Signal word (CLP) : Danger

Hazardous ingredients : ethyl methanesulfonate, methyl methanesulfonate, 1,4-naphthoquinone, 4-Nitroquinoline N-

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oxide, phenacetin, safrole, 1,3,5-trinitrobenzene, Methylene Chloride

Hazard statements (CLP) : H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

H350 - May cause cancer

H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : 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

P308+P313 - IF exposed or concerned: Get medical advice/attention

P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

EUH phrases : EUH208 - Contains 1,4-naphthoquinone(130-15-4), quintozene(82-68-8). May produce an

allergic reaction

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]
Methylene Chloride (Component)	(CAS No) 75-09-2 (EC no) 200-838-9 (EC index no) 602-004-00-3	96.8	Carc. 2, H351
chlorobenzilate (Component)	(CAS No) 510-15-6 (EC no) 208-110-2 (EC index no) 607-159-00-0	0.2	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1-chloronaphthalene (Component)	(CAS No) 90-13-1 (EC no) 201-967-3	0.2	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
2,6-dichlorophenol (Component)	(CAS No) 87-65-0 (EC no) 201-761-3	0.2	Skin Corr. 1B, H314 Aquatic Chronic 2, H411
ethyl methanesulfonate (Component)	(CAS No) 62-50-0 (EC no) 200-536-7	0.2	Acute Tox. 4 (Oral), H302 Carc. 1B, H350
hexachloropropene (Component)	(CAS No) 1888-71-7 (EC no) 217-560-9	0.2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
methyl methanesulfonate (Component)	(CAS No) 66-27-3 (EC no) 200-625-0	0.2	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 18, H350 STOT SE 3, H335
1,4-naphthoquinone (Component)	(CAS No) 130-15-4 (EC no) 204-977-6	0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
4-Nitroquinoline N-oxide (Component)	(CAS No) 56-57-5 (EC no) 200-281-1	0.2	Acute Tox. 2 (Oral), H300
pentachlorobenzene (Component)	(CAS No) 608-93-5 (EC no) 210-172-0 (EC index no) 602-074-00-5	0.2	Flam. Sol. 1, H228 Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
quintozene (Component)	(CAS No) 82-68-8 (EC no) 201-435-0 (EC index no) 609-043-00-5	0.2	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
phenacetin (Component)	(CAS No) 62-44-2 (EC no) 200-533-0	0.2	Carc. 1A, H350 STOT RE 1, H372
safrole (Component)	(CAS No) 94-59-7 (EC no) 202-345-4 (EC index no) 605-020-00-9	0.2	Acute Tox. 4 (Oral), H302 Muta. 2, H341 Carc. 1B, H350
1,2,4,5-tetrachlorobenzene (Component)	(CAS No) 95-94-3 (EC no) 202-466-2	0.2	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,3,5-trinitrobenzene (Component)	(CAS No) 99-35-4 (EC no) 202-752-7 (EC index no) 609-005-00-8	0.2	Expl. 1.1, H201 Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

#### **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 : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse. Immediately call a poison center or doctor/physician. Wash with plenty of

soap and water. Wash contaminated clothing before reuse.

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. Call a POISON

CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries after inhalation : May cause cancer by inhalation.

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant

health hazard. Harmful in contact with skin.

Symptoms/injuries 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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

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

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 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.

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.

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 : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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#### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

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. Obtain special instructions before use. Do not handle until all safety precautions have

been read and understood.

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

Storage conditions : Keep container closed when not in use. Keep container tightly closed and in a well-ventilated

place. Keep away from any flames or sparking source.

Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

#### 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 chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin

contact.

Respiratory protection : Wear appropriate mask.

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. рΗ No data available No data available Melting point 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) Non flammable Relative density No data available Solubility No data available Explosive properties No data available Oxidizing properties No data available **Explosion limits** No data available

#### 9.2. Other information

No additional information available

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	SECTION	10: Stability	and reactivity
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#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Not established.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

#### SECTION 11: Toxicological information

11.1.	Information	on toxical	logical	offocts
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11.1. Information on toxicological	effects
Acute toxicity	: Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation: Harmful if inhaled
Appendix IX Mix 2	
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
chlorobenzilate (510-15-6)	
LD50 oral rat	700 mg/kg (Rat)
LD50 dermal rat	> 10000 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE CLP (oral)	700.000 mg/kg body weight
1-chloronaphthalene (90-13-1)	
LD50 oral rat	1540 mg/kg (Rat)
ATE CLP (oral)	1540.000 mg/kg body weight
2,6-dichlorophenol (87-65-0)	
LD50 oral rat	2940 mg/kg (Rat; Weight of evidence)
ATE CLP (oral)	2940.000 mg/kg body weight
ethyl methanesulfonate (62-50-0)	
ATE CLP (oral)	500.000 mg/kg body weight
methyl methanesulfonate (66-27-3)	
LD50 oral rat	225 mg/kg (Rat)
ATE CLP (oral)	225.000 mg/kg body weight
1,4-naphthoquinone (130-15-4)	
LD50 oral rat	190 mg/kg (Rat; Experimental value)
LD50 dermal rat	202 mg/kg (Rat; Experimental value)
ATE CLP (oral)	190.000 mg/kg body weight
ATE CLP (dermal)	202.000 mg/kg body weight
4-Nitroquinoline N-oxide (56-57-5)	
LD50 oral rat	12.6 mg/kg Subcutaneous
ATE CLP (oral)	12.600 mg/kg body weight
pentachlorobenzene (608-93-5)	
LD50 oral rat	1080 mg/kg (Rat)
ATE CLP (oral)	1080.000 mg/kg body weight
quintozene (82-68-8)	
LD50 oral rat	1100 mg/kg (Rat)
LD50 dermal rat	4000 mg/kg (Rat)
ATE CLP (oral)	1100.000 mg/kg body weight
ATE CLP (dermal)	4000.000 mg/kg body weight
phenacetin (62-44-2)	
LD50 oral rat	> 1000 mg/kg (Rat)
safrole (94-59-7)	
LD50 oral rat	1950 mg/kg (Rat)
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safrole (94-59-7)		
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)	
ATE CLP (oral)	1950.000 mg/kg body weight	
1,2,4,5-tetrachlorobenzene (95-94-3)		
LD50 oral rat	3105 mg/kg (Rat)	
ATE CLP (oral)	3105.000 mg/kg body weight	
1,3,5-trinitrobenzene (99-35-4)		
LD50 oral rat	275 mg/kg (Rat)	
ATE CLP (oral)	5.000 mg/kg body weight	
ATE CLP (dermal)	5.000 mg/kg body weight	
ATE CLP (gases)	100.000 ppmV/4h	
ATE CLP (vapors)	0.500 mg/l/4h	
ATE CLP (dust, mist)	0.050 mg/l/4h	
Methylene Chloride (75-09-2)		
LD50 oral rat	> 2000 mg/kg (Rat; Literature study)	
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature study)	
Skin corrosion/irritation	: Not classified	
	Based on available data, the classification criteria are not met	
Serious eye damage/irritation	: Not classified	
	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	: May cause cancer.	
	May cause cancer by inhalation May cause cancer	
Reproductive toxicity	: Not classified	
	Based on available data, the classification criteria are not met	
Specific target organ toxicity (single exposure)	: Not classified	
	Based on available data, the classification criteria are not met	
Specific target organ toxicity (repeated	: Not classified	
exposure)	Based on available data, the classification criteria are not met	
Assiration borond		
Aspiration hazard	: Not classified	
	Based on available data, the classification criteria are not met	
Potential Adverse human health effects and	: Harmful if swallowed. Harmful in contact with skin.	

#### SECTION 12: Ecological information

10.1	Taviaitu
12.1.	IOXICITY

symptoms

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

chlorobenzilate (510-15-6)	
LC50 fish 1	0.6 mg/l 48 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	0.9 mg/l (48 h; Daphnia pulex; Young)
EC50 other aquatic organisms 1	0.6 mg/l (48 h; Simocephalus serrulatis; Young)
LC50 fish 2	1.94 mg/l (Oryzias latipes)
1-chloronaphthalene (90-13-1)	
LC50 fish 1	2.3 mg/l (96 h; Lepomis macrochirus)
LC50 fish 2	0.69 - 2.4 mg/l (96 h; Cyprinodon variegatus)
Threshold limit other aquatic organisms 1	< 0.17 mg/l (Daphnia magna)
Threshold limit algae 1	0.1 mg/l (96 h; Selenastrum capricornutum)
2,6-dichlorophenol (87-65-0)	
LC50 fish 1	6.4 mg/l (96 h; Oryzias latipes)
EC50 Daphnia 1	3.4 mg/l (48 h; Daphnia magna; Locomotor effect)
LC50 fish 2	3.91 mg/l (96 h; Pisces)
EC50 Daphnia 2	6 mg/l (24 h; Daphnia magna; Locomotor effect)
Threshold limit algae 1	29 mg/l (96 h; Selenastrum capricornutum; Growth)

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2,6-dichlorophenol (87-65-0)	
Threshold limit algae 2	9.7 mg/l (96 h; Chlorella vulgaris; Growth)
1,4-naphthoquinone (130-15-4)	
TLM fish 1	0.3 - 0.6,48 h; Pisces
Threshold limit algae 1	0.3 - 0.6,Cyanophyta; Toxicity test
Threshold limit algae 2	0.011 mg/l (72 h; Chlorophyta; Toxicity test)
pentachlorobenzene (608-93-5)	
LC50 fish 1	0.25 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 1	0.35 mg/l (48 h; Daphnia magna)
LC50 fish 2	2.76 mg/l (48 h; Oryzias latipes)
EC50 Daphnia 2	0.16 mg/l (96 h; Daphnia magna)
quintozene (82-68-8)	
LC50 fish 1	> 1.2 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
LC50 fish 2	> 1.2 mg/l (96 h; Leuciscus idus)
	7 1.2 mg/ (00 ft, Ecucious fuus)
phenacetin (62-44-2)	225 may 1/40 h. On wing latings)
LC50 fish 1	335 mg/l (48 h; Oryzias latipes)
1,2,4,5-tetrachlorobenzene (95-94-3)	
LC50 fish 1	0.8 mg/l (96 h; Cyprinodon variegatus; Static system)
EC50 Daphnia 1	> 530 mg/l (48 h; Daphnia magna; Static system)
LC50 fish 2	1.6 mg/l (96 h; Lepomis macrochirus; Static system)
1,3,5-trinitrobenzene (99-35-4)	
LC50 fish 1	0.52 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	2.7 mg/l (48 h; Daphnia magna; Reproduction)
LC50 fish 2	1.03 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 2	3 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	0.1 mg/l (120 h; Selenastrum capricornutum; Reproduction)
Methylene Chloride (75-09-2)	
LC50 fish 1	193 mg/l (96 h; Pimephales promelas; Flow-through system)
EC50 Daphnia 1	168.2 mg/l (48 h; Daphnia magna)
LC50 fish 2	220 mg/l (96 h; Lepomis macrochirus; Flow-through system)
Threshold limit algae 1	1450 mg/l (192 h; Scenedesmus quadricauda; Cell numbers)
Threshold limit algae 2	550 mg/l (192 h; Microcystis aeruginosa)
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12.2. Persistence and degradability	
Appendix IX Mix 2	
	May cause long-term adverse effects in the environment.
Appendix IX Mix 2	May cause long-term adverse effects in the environment.
Appendix IX Mix 2 Persistence and degradability	May cause long-term adverse effects in the environment.  Not readily biodegradable in water.
Appendix IX Mix 2 Persistence and degradability  chlorobenzilate (510-15-6) Persistence and degradability	
Appendix IX Mix 2 Persistence and degradability  chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1)	Not readily biodegradable in water.
Appendix IX Mix 2 Persistence and degradability  chlorobenzilate (510-15-6) Persistence and degradability	
Appendix IX Mix 2 Persistence and degradability  chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no
Appendix IX Mix 2 Persistence and degradability chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0)	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.
Appendix IX Mix 2 Persistence and degradability  chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no
Appendix IX Mix 2 Persistence and degradability chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0)	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil.
Appendix IX Mix 2 Persistence and degradability  chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.
Appendix IX Mix 2 Persistence and degradability chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability  BOD (% of ThOD) ethyl methanesulfonate (62-50-0)	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.  0.148 % ThOD (3 h)
Appendix IX Mix 2 Persistence and degradability chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability  BOD (% of ThOD) ethyl methanesulfonate (62-50-0) Persistence and degradability	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.
Appendix IX Mix 2 Persistence and degradability  chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability  BOD (% of ThOD)  ethyl methanesulfonate (62-50-0) Persistence and degradability  hexachloropropene (1888-71-7)	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.  0.148 % ThOD (3 h)  Biodegradability in water: no data available.
Appendix IX Mix 2 Persistence and degradability chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability  BOD (% of ThOD) ethyl methanesulfonate (62-50-0) Persistence and degradability  hexachloropropene (1888-71-7) Persistence and degradability	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.  0.148 % ThOD (3 h)
Appendix IX Mix 2 Persistence and degradability chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability  BOD (% of ThOD) ethyl methanesulfonate (62-50-0) Persistence and degradability hexachloropropene (1888-71-7) Persistence and degradability methyl methanesulfonate (66-27-3)	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.  0.148 % ThOD (3 h)  Biodegradability in water: no data available.  Biodegradability in soil: no data available.
Appendix IX Mix 2 Persistence and degradability chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability  BOD (% of ThOD) ethyl methanesulfonate (62-50-0) Persistence and degradability hexachloropropene (1888-71-7) Persistence and degradability methyl methanesulfonate (66-27-3) Persistence and degradability	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.  0.148 % ThOD (3 h)  Biodegradability in water: no data available.
Appendix IX Mix 2 Persistence and degradability chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability  BOD (% of ThOD) ethyl methanesulfonate (62-50-0) Persistence and degradability  hexachloropropene (1888-71-7) Persistence and degradability  methyl methanesulfonate (66-27-3) Persistence and degradability  1,4-naphthoquinone (130-15-4)	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.  0.148 % ThOD (3 h)  Biodegradability in water: no data available.  Biodegradability in soil: no data available.
Appendix IX Mix 2 Persistence and degradability  chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability  BOD (% of ThOD)  ethyl methanesulfonate (62-50-0) Persistence and degradability  hexachloropropene (1888-71-7) Persistence and degradability  methyl methanesulfonate (66-27-3) Persistence and degradability	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.  0.148 % ThOD (3 h)  Biodegradability in water: no data available.  Biodegradability in soil: no data available.
Appendix IX Mix 2 Persistence and degradability  chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability  BOD (% of ThOD)  ethyl methanesulfonate (62-50-0) Persistence and degradability  hexachloropropene (1888-71-7) Persistence and degradability  methyl methanesulfonate (66-27-3) Persistence and degradability  1,4-naphthoquinone (130-15-4)	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.  0.148 % ThOD (3 h)  Biodegradability in water: no data available.  Biodegradability in soil: no data available.  Biodegradability in soil: no data available.  Biodegradability in soil: no data available.
Appendix IX Mix 2 Persistence and degradability  chlorobenzilate (510-15-6) Persistence and degradability  1-chloronaphthalene (90-13-1) Persistence and degradability  2,6-dichlorophenol (87-65-0) Persistence and degradability  BOD (% of ThOD)  ethyl methanesulfonate (62-50-0) Persistence and degradability  hexachloropropene (1888-71-7) Persistence and degradability  methyl methanesulfonate (66-27-3) Persistence and degradability  1,4-naphthoquinone (130-15-4) Persistence and degradability	Not readily biodegradable in water.  Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photodegradation in the air.  Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.  0.148 % ThOD (3 h)  Biodegradability in water: no data available.  Biodegradability in soil: no data available.  Biodegradability in soil: no data available.

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ccording to Regulation (EC) No. 453/2010	
pentachlorobenzene (608-93-5)	
Persistence and degradability	Not readily biodegradable in water. Biodegradability in soil: no data available.
phenacetin (62-44-2)	
Persistence and degradability	Not readily biodegradable in water.
safrole (94-59-7)	
Persistence and degradability	Biodegradability in water: no data available.
1,2,4,5-tetrachlorobenzene (95-94-3)	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Adsorbs into the soil.
1,3,5-trinitrobenzene (99-35-4)	
Persistence and degradability	Not readily biodegradable in water.
Methylene Chloride (75-09-2)	The County State of Teachers
Persistence and degradability	Not readily biodegradable in water. Biodegradable in the soil.
·	Not readily blodegradable in water. Blodegradable in the soil.
12.3. Bioaccumulative potential	
Appendix IX Mix 2	
Bioaccumulative potential	Not established.
chlorobenzilate (510-15-6)	
BCF fish 1	224 - 709 (Cyprinus carpio; Test duration: 8 weeks)
Log Pow	4.74
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).
1-chloronaphthalene (90-13-1)	
BCF fish 1	142 - 403 (Cyprinus carpio; Test duration: 8 weeks)
Log Pow	3.5
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2,6-dichlorophenol (87-65-0)	
BCF fish 1	4.1 - 20 (8 weeks; Cyprinus carpio)
BCF fish 2	12 (Poecilia reticulata)
Log Pow	2.57 - 3.33 (Literature)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
ethyl methanesulfonate (62-50-0)	
Bioaccumulative potential	No bioaccumulation data available.
hexachloropropene (1888-71-7)	
Bioaccumulative potential	No bioaccumulation data available.
methyl methanesulfonate (66-27-3)	
Bioaccumulative potential	No bioaccumulation data available.
1,4-naphthoquinone (130-15-4)	
Log Pow	1.71 - 1.78
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
pentachlorobenzene (608-93-5)	, , , , , , , , , , , , , , , , , , ,
BCF fish 1	3000 (72 h; Leuciscus idus)
BCF fish 2	6840 (Cyprinus carpio; Test duration: 8 weeks)
BCF other aquatic organisms 1	16000 (Bacteria)
BCF other aquatic organisms 2	4000 (24 h; Chlorella sp.)
Log Pow	4.88 - 5.69
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
quintozene (82-68-8)	
Log Pow	4.64 - 4.89
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow≤ 5).
phenacetin (62-44-2)	
BCF fish 1	<<3/<30,Cyprinus carpio; Test duration: 6 weeks
Log Pow	1.58 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
safrole (94-59-7)	
Log Pow	3.45 (Estimated value)
	5.75 (Ediminion value)
1,2,4,5-tetrachlorobenzene (95-94-3)	13000 (Salma gairdneri (Opeorhynahus mykisa): Toot duration: 9 waska)
BCF fish 1 BCF fish 2	13000 (Salmo gairdneri (Oncorhynchus mykiss); Test duration: 8 weeks)
DOI: 11911 7	1650 - 4830 (Cyprinus carpio)

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1,2,4,5-tetrachlorobenzene (95-94-3)	
BCF other aquatic organisms 1	> 5012
Log Pow	4.5 - 4.98
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
1,3,5-trinitrobenzene (99-35-4)	
Log Pow	1.18
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Methylene Chloride (75-09-2)	
BCF fish 1	2 - 40 (Cyprinus carpio; Test duration: 6 weeks)
Log Pow	1.25 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

#### 12.4. Mobility in soil

chlorobenzilate (510-15-6)	
Ecology - soil	Not toxic to bees. May be harmful to plant growth, blooming and fruit formation.
Methylene Chloride (75-09-2)	
Surface tension	0.028 N/m (20 °C)
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

#### 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.

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) : 2810
UN-No.(IATA) : 2810

14.2. UN proper shipping name

Proper Shipping Name (ADR) : TOXIC LIQUID, ORGANIC, N.O.S.
Proper Shipping Name (IATA) : TOXIC LIQUID, ORGANIC, N.O.S.
Proper Shipping Name (IMDG) : TOXIC LIQUID, ORGANIC, N.O.S.
Proper Shipping Name (ADN) : TOXIC LIQUID, ORGANIC, N.O.S.

Transport document description (ADR) : UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (dichloromethane(75-09-2)), 6.1, III, (E)

#### 14.3. Packing group

 Class (ADR)
 : 6.1

 Classification code (ADR)
 : T1

 Class (IATA)
 : 6.1

 Class (IMDG)
 : 6.1

 Class (ADN)
 : 6.1

 Hazard labels (ADR)
 : 6.1



Hazard labels (IATA) : 6.1



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14.4. Packing group

Packing group (ADR) : III
Packing group (IATA) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

#### 14.6.1. Overland transport

Hazard identification number (Kemler No.) : 60
Classification code (ADR) : T1

Orange plates

60 2810

Special provision (ADR) : 274, 614

Transport category (ADR) : 2
Tunnel restriction code (ADR) : E
Limited quantities (ADR) : 51
Excepted quantities (ADR) : E1

#### 14.6.2. Transport by sea

No additional information available

#### 14.6.3. Air transport

CAO packing instructions (IATA) : 663 : 220L CAO max net quantity (IATA) PCA packing instructions (IATA) 655 PCA Limited quantities (IATA) : Y642 PCA limited quantity max net quantity (IATA) : 2L PCA max net quantity (IATA) : 60L PCA Excepted quantities (IATA) : E1 Special provision (IATA) : A137 ERG code (IATA) : 6L

#### 14.6.4. Inland waterway transport

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.

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PHV SDS EU

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