

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03/20/2019 Revision date: 03/20/2019 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name OCC Pesticide Standard

Product code AL0-130577

Recommended use and restrictions on use

No additional information available

Phenova

6390 Joyce Dr. Suite 100

Golden, CO 80403 - 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

May cause an allergic skin reaction

May cause drowsiness or dizziness

SECTION 2: Hazard(s) identification

GHS-US classification

Flammable liquids H225 Highly flammable liquid and vapour

Category 2

Serious eye damage/eye irritation Category 2

H319 H317

H336

Causes serious eye irritation

Skin sensitization, Category

May cause cancer

Carcinogenicity Category

H350

Specific target organ

toxicity (single exposure)

Category 3

Full text of H statements : see section 16

GHS Label elements, including precautionary statements **GHS-US** labeling

Hazard pictograms (GHS-US)







Signal word (GHS-US) : Danger

Hazard statements (GHS-US) H225 - Highly flammable liquid and vapour

H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H336 - May cause drowsiness or dizziness

H350 - May cause cancer

Precautionary statements (GHS-US) P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 - Keep container tightly closed.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

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. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

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P337+P313 - If eye irritation persists: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

P370+P378 - In case of fire: Use media other than water to extinguish. 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

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc.
acetone (Component)	(CAS-No.) 67-64-1	98.3
alachlor (Component)	(CAS-No.) 15972-60-8	0.1
captan (Component)	(CAS-No.) 133-06-2	0.1
hexachlorobenzene (Component)	(CAS-No.) 118-74-1	0.1
chlorothalonil (Component)	(CAS-No.) 1897-45-6	0.1
Dicofol (Component)	(CAS-No.) 115-32-2	0.1
Nitrofen (Component)	(CAS-No.) 1836-75-5	0.1

Full text of hazard classes and H-statements : see section 16

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.

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.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

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

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

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.

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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.

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

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.

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

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 materials : Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OCC Pesticide Standard		
ACGIH	Local name	Acetone
ACGIH	ACGIH TWA (ppm)	250 ppm
ACGIH	ACGIH STEL (ppm)	500 ppm
ACGIH	Remark (ACGIH)	eye irr; CNS impair; BEI
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m³)	2400 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA

alachlor (15972-60-8)		
ACGIH	Local name	Alachlor
ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (Inhalable fraction and vapor)
ACGIH	Remark (ACGIH)	Hemosiderosis; DSEN; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure)
ACGIH	Regulatory reference	ACGIH 2018

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captan (133-06-2)		
ACGIH	ACGIH TWA (mg/m³)	5 mg/m³ (Inhalable fraction)
chlorothalonil (189	7-45-6)	
Not applicable		
hexachlorobenzen	e (118-74-1)	
ACGIH	Local name	Hexachlorobenzene
ACGIH	ACGIH TWA (mg/m³)	0.002 mg/m³
ACGIH	Remark (ACGIH)	Porphyrin eff; Skin dam; CNS impair
ACGIH	Regulatory reference	ACGIH 2018
Dicofol (115-32-2)		
Not applicable		
Nitrofen (1836-75-5)	
Not applicable		
acetone (67-64-1)		
ACGIH	Local name	Acetone
ACGIH	ACGIH TWA (ppm)	250 ppm
ACGIH	ACGIH STEL (ppm)	500 ppm
ACGIH	Remark (ACGIH)	eye irr; CNS impair; BEI
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m³)	2400 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA

8.2. Appropriate engineering controls

Appropriate engineering controls

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

8.3. Individual protection measures/Personal protective equipment

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

Personal protective equipment symbol(s):









Other information:

Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properti	9.1.	Information on	basic physical ar	nd chemical	properties
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Physical state : Liquid Color : Colorless characteristic Odor Odor threshold : No data available No data available рΗ No data available Melting point Freezing point : No data available No data available Boiling point Flash point : No data available Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Non flammable. Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : No data available : No data available Solubility Log Pow : No data available : No data available Auto-ignition temperature Decomposition temperature No data available Viscosity, kinematic : No data available No data available Viscosity, dynamic **Explosion limits** No data available : No data available Explosive properties Oxidizing properties : 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

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

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

alachlor (15972-60-8)	
LD50 oral rat	930 mg/kg (Rat, Oral)
LD50 dermal rat	> 2000 mg/kg (Rat, Dermal)
LD50 dermal rabbit	3500 mg/kg (Rabbit, Dermal)
ATE US (oral)	930 mg/kg body weight
ATE US (dermal)	3500 mg/kg body weight

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captan (133-06-2)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental
	value, Oral)
LD50 dermal rabbit	> 2000 mg/kg body weight (EPA OPP 81-2, 3 day(s), Rabbit, Male / female, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	0.78 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (dust))
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h
chlorothalonil (1897-45-6)	
LD50 oral rat	> 5000 mg/kg (Rat, Oral)
LD50 dermal rat	> 10000 mg/kg (Rat, Dermal)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Dermal)
LC50 inhalation rat (mg/l)	0.22 mg/l (4 h, Rat, Inhalation (dust))
ATE US (gases)	100 ppmV/4h
ATE US (vapors)	0.22 mg/l/4h
ATE US (dust, mist)	0.22 mg/l/4h
hexachlorobenzene (118-74-1)	
LD50 oral rat	10000 mg/kg (Rat, Oral)
ATE US (oral)	10000 mg/kg body weight
Dicofol (115-32-2)	
LD50 oral rat	575 mg/kg
LD50 dermal rabbit	1870 mg/kg
LC50 inhalation rat (mg/l)	> 5000 mg/m³
ATE US (oral)	575 mg/kg body weight
ATE US (dermal)	1870 mg/kg body weight
Nitrofen (1836-75-5)	
LD50 oral rat	750 mg/kg
LD50 dermal rat	5000 mg/kg
ATE US (oral)	750 mg/kg body weight
ATE US (dermal)	5000 mg/kg body weight
THE GO (dollial)	ooo nigang body weight
sections (67 64 4)	
acetone (67-64-1)	5800 ma/kg (Equivalent or similar to OECD 401 Pat Female Experimental value Oral)
LD50 oral rat	5800 mg/kg (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral)
LD50 oral rat LD50 dermal rabbit	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal)
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l)	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours))
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral)	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal)	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors)	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist)	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h : Not classified
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h : Not classified : Causes serious eye irritation.
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h : Not classified : Causes serious eye irritation. : May cause an allergic skin reaction.
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h : Not classified : Causes serious eye irritation. : May cause an allergic skin reaction. : Not classified
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization Germ cell mutagenicity	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h Not classified Causes serious eye irritation. May cause an allergic skin reaction. Not classified Based on available data, the classification criteria are not met
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h : Not classified : Causes serious eye irritation. : May cause an allergic skin reaction. : Not classified
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h Not classified Causes serious eye irritation. May cause an allergic skin reaction. Not classified Based on available data, the classification criteria are not met
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization Germ cell mutagenicity	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h Not classified Causes serious eye irritation. May cause an allergic skin reaction. Not classified Based on available data, the classification criteria are not met
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity captan (133-06-2) IARC group	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h : Not classified : Causes serious eye irritation. : May cause an allergic skin reaction. : Not classified Based on available data, the classification criteria are not met : May cause cancer.
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity captan (133-06-2) IARC group hexachlorobenzene (118-74-1)	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h : Not classified : Causes serious eye irritation. : May cause an allergic skin reaction. : Not classified Based on available data, the classification criteria are not met : May cause cancer.
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity captan (133-06-2) IARC group hexachlorobenzene (118-74-1) National Toxicology Program (NTP) Status	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h : Not classified : Causes serious eye irritation. : May cause an allergic skin reaction. : Not classified Based on available data, the classification criteria are not met : May cause cancer.
LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE US (oral) ATE US (dermal) ATE US (vapors) ATE US (dust, mist) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity captan (133-06-2) IARC group hexachlorobenzene (118-74-1)	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal) 76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours)) 5800 mg/kg body weight 20000 mg/kg body weight 76 mg/l/4h 76 mg/l/4h : Not classified : Causes serious eye irritation. : May cause an allergic skin reaction. : Not classified Based on available data, the classification criteria are not met : May cause cancer.

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Nitrofen (1836-75-5)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
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

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

alachlor (15972-60-8)		
LC50 fish 1	1.8 mg/l (96 h, Salmo gairdneri)	
captan (133-06-2)		
LC50 fish 1	93 µg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Salmo trutta, Static system, Fresh water, Experimental value, GLP)	
EC50 Daphnia 1	> 7.1 mg/l (ASTM, Daphnia magna, Static system, Fresh water, Experimental value)	
ErC50 (algae)	11.6 mg/l (OECD 201: Alga, Growth Inhibition Test, 96 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)	
chlorothalonil (1897-45-6)		
LC50 fish 1	0.012 mg/l (96 h, Salmo gairdneri)	
EC50 Daphnia 1	0.059 mg/l (48 h, Daphnia magna)	
hexachlorobenzene (118-74-1)		
LC50 fish 1	2.3 mg/l (96 h, Salmo gairdneri)	
EC50 Daphnia 1	> 0.03 mg/l (24 h, Daphnia magna)	
Dicofol (115-32-2)		
LC50 fish 1	0.21 mg/l Oncorhynchus mykiss (Rainbow trout)	
EC50 Daphnia 1	0.08 mg/l	
Nitrofen (1836-75-5)		
LC50 fish 1	7 mg/l	
EC50 Daphnia 1	0.217 mg/l	
acetone (67-64-1)		
LC50 fish 1	5540 mg/l (EU Method C.1, 96 h, Salmo gairdneri, Static system, Fresh water, Experimental value, Nominal concentration)	

12.2. Persistence and degradability

OCC Pesticide Standard	
Persistence and degradability	Not established.
alachlor (15972-60-8)	
Persistence and degradability	Biodegradability in soil: no data available.
captan (133-06-2)	
Persistence and degradability Not readily biodegradable in water.	
Persistence and degradability	Not readily biodegradable in water.
chlorothalonil (1897-45-6)	Not readily biodegradable in water.

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12.4. Mobility in soil

hexachlorobenzene (118-74-1) Persistence and degradability

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reisistence and degradability	water in anaerobic conditions.
Dicofol (115-32-2)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.
Nitrofen (1836-75-5)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.
acetone (67-64-1)	, ,
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily
. o.o.o.o.oo ana aog.aaaz,	biodegradable in water.
Biochemical oxygen demand (BOD)	1.43 g O₂/g substance
Chemical oxygen demand (COD)	1.92 g O₂/g substance
ThOD	2.2 g O₂/g substance
BOD (% of ThOD)	0.872 (20 day(s), Literature study)
2.3. Bioaccumulative potential	
OCC Pesticide Standard	
Bioaccumulative potential	Not established.
captan (133-06-2)	
BCF fish 1	140 (Other, 29 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, GLP)
Log Pow	2.57 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
chlorothalonil (1897-45-6)	Zon potential for Disassential and (201 500).
BCF fish 1	0.1 - 125 (Cyprinus carpio)
BCF other aquatic organisms 1	0.02 mg/l (336 h, Algae)
Log Pow	2.94
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
hexachlorobenzene (118-74-1)	1 (************************************
BCF fish 1	20000 (Salmo gairdneri, Test duration: 8 weeks)
BCF fish 2	30000 (Cyprinus carpio, Test duration: 8 weeks)
BCF other aquatic organisms 1	25000 (Algae)
BCF other aquatic organisms 2	1130 (720 h, Daphnia magna)
Log Pow	5.73 - 6.39 (Experimental value)
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
Dicofol (115-32-2)	1.0.1
BCF fish 1	9500 (Pimephales promelas)
BCF fish 2	15000 (Pimephales promelas)
Log Pow	4.28
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
Nitrofen (1836-75-5)	
BCF fish 1	1546 (792 h, Gambusia affinis)
BCF other aquatic organisms 1	405 (792 h, Chlorophyta)
Log Pow	3.3 - 5.5 (Calculated)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
acetone (67-64-1)	
	0.00 (D)
BCF fish 1	1 () 69 (Pisces)
BCF fish 1 BCF other aquatic organisms 1	0.69 (Pisces) 3 (RCFWIN, Calculated value)
BCF fish 1 BCF other aquatic organisms 1 Log Pow	3 (BCFWIN, Calculated value) -0.24 (Test data)

Non degradable in the soil. Not readily biodegradable in water. Not easily biodegradable in

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alachlor (15972-60-8)	
Ecology - soil	Not toxic to bees in normal conditions of use.
captan (133-06-2)	
Surface tension	72.4 mN/m (20 °C)
Ecology - soil	Not toxic to plants. Not toxic to bees in normal conditions of use.
chlorothalonil (1897-45-6)	
Ecology - soil	Not toxic to bees.
hexachlorobenzene (118-74-1)	
Ecology - soil	Adsorbs into the soil. Not toxic to bees.
Dicofol (115-32-2)	
Ecology - soil	Adsorbs into the soil. Not toxic to plants. Not toxic to bees.
Nitrofen (1836-75-5)	
Ecology - soil	Adsorbs into the soil. Not toxic to bees.
acetone (67-64-1)	
Surface tension	0.0237 N/m
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging 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

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1993 Flammable liquids, n.o.s. (acetone; alachlor; captan; hexachlorobenzene;

chlorothalonil;;), 3, II

UN-No.(DOT) : UN1993

Proper Shipping Name (DOT) : Flammable liquids, n.o.s.

acetone; alachlor; captan; hexachlorobenzene; chlorothalonil;;

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : II - Medium Danger Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202 DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Symbols : G - Identifies PSN requiring a technical name

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DOT Special Provisions (49 CFR 172.102)

: IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when

the flash point of the hazardous material transported is greater than 0 C (32 F).

TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the

MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150 DOT Quantity Limitations Passenger aircraft/rail : 5 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

DOT Vessel Stowage Location

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

Emergency Response Guide (ERG) Number

Other information

: No supplementary information available.

Transportation of Dangerous Goods

Not applicable

Transport by sea

Transport document description (IMDG) : UN 1993 FLAMMABLE LIQUID, N.O.S., 3, II

UN-No. (IMDG) : 1993

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

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : II - substances presenting medium danger

Limited quantities (IMDG) : 1 L

Air transport

Transport document description (IATA) : UN 1993 Flammable liquid, n.o.s., 3, II

UN-No. (IATA) : 1993

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

Class (IATA) : 3 - Flammable Liquids

Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

alachlor (15972-60-8)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

captan (133-06-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 10 lb

chlorothalonil (1897-45-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

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hexachlorobenzene (118-74-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 10 lb

Dicofol (115-32-2)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

CERCLA RQ 10 lb

Nitrofen (1836-75-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

acetone (67-64-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ 5000 lb

15.2. International regulations

CANADA

alachlor (15972-60-8)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

captan (133-06-2)

Listed on the Canadian DSL (Domestic Substances List)

chlorothalonil (1897-45-6)

Listed on the Canadian DSL (Domestic Substances List)

hexachlorobenzene (118-74-1)

Listed on the Canadian DSL (Domestic Substances List)

Dicofol (115-32-2)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Nitrofen (1836-75-5)

Listed on the Canadian NDSL (Non-Domestic Substances List)

acetone (67-64-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

captan (133-06-2)

Listed on EPA Hazardous Air Pollutant (HAPS)

chlorothalonil (1897-45-6)

Listed on IARC (International Agency for Research on Cancer)

hexachlorobenzene (118-74-1)

Listed on IARC (International Agency for Research on Cancer)

Listed as carcinogen on NTP (National Toxicology Program)

Listed on EPA Hazardous Air Pollutant (HAPS)

Nitrofen (1836-75-5)

Listed on IARC (International Agency for Research on Cancer) Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

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alachlor (15972-	alachlor (15972-60-8)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		
captan (133-06-	2)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	300 μg/day	
chlorothalonil (1897-45-6)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	41 μg/day	
hexachlorobenzene (118-74-1)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	Yes	No	No	0.4 μg/day	
Nitrofen (1836-7	'5-5)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	9 μg/day	

SECTION 16: Other information

Revision date : 03/20/2019

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.

Full text of H-phrases:

411	in text of 11 princees.					
	H225	Highly flammable liquid and vapour				
	H317	May cause an allergic skin reaction				
	H319	Causes serious eye irritation				
	H336	May cause drowsiness or dizziness				
	H350	May cause cancer				

Phenova US SDS REV

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