

#### Safety Data Sheet

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

Date of issue: 02/06/2018 Revision date:

Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Product name : Custom 508 Spike Mix\_MeOH

Product code : AL0-130349
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]

 Flam. Liq. 2
 H225

 Acute Tox. 3 (Oral)
 H301

 Acute Tox. 3 (Dermal)
 H311

 STOT SE 1
 H370

 Aquatic Chronic 3
 H412

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

F; R11 T: R23/24/25

T; R39/23/24/25

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)

Signal word (CLP)



GHS02





GHS06

: Danger

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Hazard statements (CLP) : H225 - Highly flammable liquid and vapor

H301+H311 - Toxic if swallowed or in contact with skin

H370 - Causes damage to organs

H412 - Harmful 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 P270 - Do not eat, drink or smoke when using this product

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water

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

P361+P364 - Take off immediately all contaminated clothing and wash it before reuse

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

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

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

No labeling applicable

#### 2.3. Other hazards

No additional information available

#### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
methanol (Component)	(CAS No) 67-56-1 (EC-No.) 200-659-6 (EC index no) 603-001-00-X	99.99	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
alachlor (Component)	(CAS No.) 15972-60-8 (EC-No.) 240-110-8 (EC index no.) 616-015-00-6	0.002	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
dieldrin (Component)	(CAS No) 60-57-1 (EC-No.) 200-484-5 (EC index no) 602-049-00-9	0.001	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Carc. 2, H351 STOT RE 1, H372 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
Hexachlorocyclopentadiene (Component)	(CAS No) 77-47-4 (EC-No.) 201-029-3 (EC index no) 602-078-00-7	0.001	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation), H330 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
heptachlor epoxide (isomer B) (Component)	(CAS No) 1024-57-3 (EC-No.) 213-831-0 (EC index no) 602-063-00-5	0.0002	Acute Tox. 3 (Oral), H301 Carc. 2, H351 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10000) Aquatic Chronic 1, H410 (M=10000)
endrin (Component)	(CAS No) 72-20-8 (EC-No.) 200-775-7 (EC index no) 602-051-00-X	0.0001	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=1000)
Name	Product identifier	Specific c	oncentration limits
methanol (Component)	(CAS No) 67-56-1 (EC-No.) 200-659-6 (EC index no) 603-001-00-X		0) STOT SE 2, H371 TOT SE 1, H370

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures general

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<sup>:</sup> Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician. IF exposed or concerned: Get medical advice/attention.

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First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.

Immediately call a poison center or doctor/physician. Wash with plenty of soap and water.

Wash contaminated clothing before reuse.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persists.

: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Immediately call a

poison center or doctor/physician.

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

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

health hazard. Toxic in contact with skin.

Symptoms/effects after ingestion : Toxic if 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

First-aid measures after ingestion

#### 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.

#### 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. 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.

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.

Hygiene measures : Do not eat, drink or smoke when using this product. Gently wash with plenty of so

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

#### 7.2. Conditions for safe storage, including any incompatibilities

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

container and receiving equipment.

Storage conditions : Keep in fireproof place. Keep container tightly closed. Keep container tightly closed and in a

well-ventilated place. Keep away from any flames or sparking source.

Incompatible materials : Direct sunlight. Heat sources.

#### 7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection				
8.1. Control parameters				
alachlor (15972-60-8)				
Belgium	Limit value (mg/m³)	1 mg/m³ (Alachlore (vapeur et aérosol); Belgium; Time-weighted average exposure limit 8 h)		
Belgium	Limit value (ppm)	0.1 ppm (Alachlore (vapeur et aérosol); Belgium; Time-weighted average exposure limit 8 h)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (Alachlor; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction and vapor)		
dieldrin (60-57-1)				
Belgium	Limit value (mg/m³)	0.25 mg/m³ (Dieldrin; Belgium; Time-weighted average exposure limit 8 h)		
France	VME (mg/m³)	0.25 mg/m³ (Dieldrine; France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	0.1 mg/m³ (Dieldrin; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction and vapor)		
endrin (72-20-8)				
Belgium	Limit value (mg/m³)	0.1 mg/m³ (Endrin; Belgium; Time-weighted average exposure limit 8 h)		
France	VME (mg/m³)	0.1 mg/m³ (Endrine; France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	0.1 mg/m³ (Endrin; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)		
heptachlor epoxide (isomer	B) (1024-57-3)			
Belgium	Limit value (mg/m³)	0.05 mg/m³ (Heptachlore époxyde; Belgium; Time- weighted average exposure limit 8 h)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	0.05 mg/m³ (Heptachlor epoxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)		
Hexachlorocyclopentadiene	(77-47-4)			
Belgium	Limit value (mg/m³)	0.11 mg/m³ (Hexachlorocyclopentadiène; Belgium; Time-weighted average exposure limit 8 h)		
Belgium	Limit value (ppm)	0.01 ppm (Hexachlorocyclopentadiène; Belgium; Time-weighted average exposure limit 8 h)		
France	VME (mg/m³)	0.1 mg/m³ (Hexachlorocyclopentadiène; France; Time- weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)		
France	VME (ppm)	0.01 ppm (Hexachlorocyclopentadiène; France; Time- weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	0.01 ppm (Hexachlorocyclopentadiene; USA; Time- weighted average exposure limit 8 h; TLV - Adopted Value)		
methanol (67-56-1)				
EU	IOELV TWA (mg/m³)	260 mg/m³ (Methanol; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)		
EU	IOELV TWA (ppm)	200 ppm (Methanol; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)		
Belgium	Limit value (mg/m³)	266 mg/m³ (Alcool méthylique; Belgium; Time- weighted average exposure limit 8 h)		
Belgium	Limit value (ppm)	200 ppm (Alcool méthylique; Belgium; Time-weighted average exposure limit 8 h)		
Belgium	Short time value (mg/m³)	333 mg/m³ (Alcool méthylique; Belgium; Short time value)		
Belgium	Short time value (ppm)	250 ppm (Alcool méthylique; Belgium; Short time value)		
France	VLE (mg/m³)	1300 mg/m³ (Methanol; France; Short time value; VL: Valeur non réglementaire indicative)		
France	VLE (ppm)	1000 ppm (Methanol; France; Short time value; VL: Valeur non réglementaire indicative)		

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methanol (67-56-1)				
France	VME (mg/m³)	260 mg/m³ (Methanol; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)		
France	VME (ppm)	200 ppm (Methanol; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200 ppm (Methanol; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)		
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250 ppm (Methanol; USA; Short time value; TLV - Adopted Value)		
Netherlands	Grenswaarde TGG 8H (mg/m³)	133 mg/m³ (Methanol; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)		
Netherlands	Grenswaarde TGG 8H (ppm)	100 ppm (Methanol; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)		
United Kingdom	WEL TWA (mg/m³)	266 mg/m³ Methanol; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)		
United Kingdom	WEL TWA (ppm)	200 ppm Methanol; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)		
United Kingdom	WEL STEL (mg/m³)	333 mg/m³ Methanol; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)		
United Kingdom	WEL STEL (ppm)	250 ppm Methanol; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)		

#### 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











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 : 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.	informatio	n on b	asic pr	iysicai	and	cnemicai	properties	ı
Physica	al state					: Liaui	id	

: Colorless. Color Odor : characteristic. pΗ No data available No data available Melting point Freezing point No data available Boiling point : No data available Flash point : No data available : No data available Auto-ignition temperature Decomposition temperature No data available

Flammability (solid, gas) : Highly flammable liquid and vapor

Relative density : No data available
Solubility : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : No data available

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#### 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.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

May release flammable gases.

#### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin.

Acute toxicity	. Oral. Toxic ii swallowed. Definal. Toxic iii contact with skiir.
Custom 508 Spike Mix_MeOH	
ATE CLP (oral)	100.01 mg/kg body weight
ATE CLP (dermal)	300.03 mg/kg body weight
alachlor (15972-60-8)	
LD50 oral rat	930 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	3500 mg/kg (Rabbit)
ATE CLP (oral)	930 mg/kg body weight
ATE CLP (dermal)	3500 mg/kg body weight
dieldrin (60-57-1)	
LD50 oral rat	38 mg/kg (Rat)
ATE CLP (oral)	38 mg/kg body weight
ATE CLP (dermal)	5 mg/kg body weight
endrin (72-20-8)	
LD50 oral rat	3 mg/kg (Rat)
LD50 dermal rat	12 mg/kg (Rat)
LD50 dermal rabbit	60 mg/kg (Rabbit)
ATE CLP (oral)	3 mg/kg body weight
ATE CLP (dermal)	12 mg/kg body weight
heptachlor epoxide (isomer B) (1024-5	7-3)
LD50 oral rat	60 mg/kg (Rat)
ATE CLP (oral)	60 mg/kg body weight
Hexachlorocyclopentadiene (77-47-4)	
LD50 oral rat	315 mg/kg (Rat; Experimental value; 200 mg/kg bodyweight; Rat; Experimental value; 505 mg/kg bodyweight; Rat; Experimental value; 690 mg/kg bodyweight; Rat; Experimental value; 640 mg/kg bodyweight; Rat)
LD50 dermal rat	2000-3200,Rat; Experimental value
LD50 dermal rabbit	200 - 340 mg/kg (Rabbit; Experimental value; 430 mg/kg bodyweight; Rabbit)
LC50 inhalation rat (mg/l)	0.018 mg/l/4h (Rat; Experimental value; 0,04 mg/l/4h; Rat; Experimental value)
ATE CLP (oral)	315 mg/kg body weight
ATE CLP (dermal)	200 mg/kg body weight
ATE CLP (gases)	100 ppmV/4h
ATE CLP (vapors)	0.018 mg/l/4h
ATE CLP (dust, mist)	0.018 mg/l/4h
methanol (67-56-1)	
LD50 oral rat	> 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence)
LD50 dermal rabbit	15800 mg/kg (Rabbit; Literature study)

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methanol (67-56-1)		
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat; Literature study)	
LC50 inhalation rat (ppm)	64000 ppm/4h (Rat; Literature study)	
ATE CLP (oral)	100 mg/kg body weight	
ATE CLP (dermal)	300 mg/kg body weight	
ATE CLP (gases)	700 ppmV/4h	
ATE CLP (vapors)	3 mg/l/4h	
ATE CLP (dust, mist)	0.5 mg/l/4h	

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 : Not classified

Based on available data, the classification criteria are not met

May cause cancer

Reproductive toxicity : Not classified

Based on available data, the classification criteria are not met

Specific target organ toxicity – single exposure

: Causes damage to organs.

Specific target organ toxicity - repeated

exposure

: Not classified

Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Based on available data, the classification criteria are not met

Potential Adverse human health effects and

symptoms

: Toxic if swallowed. Toxic in contact with skin.

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

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

alachlor (15972-60-8)	alachlor (15972-60-8)				
LC50 fish 1	1.8 mg/l (LC50; 96 h)				
Threshold limit algae 1	0.35 mg/l (EC50)				
dieldrin (60-57-1)					
LC50 fish 1	0.0012 mg/l (LC50; 96 h; Salmo gairdneri)				
EC50 Daphnia 1	0.19 mg/l (EC50; 48 h)				
Threshold limit algae 1	> 100 ppm (EC50)				
endrin (72-20-8)					
LC50 fish 2	0.0006 mg/l (LC50; 96 h)				
EC50 Daphnia 2	0.0042 mg/l (EC50; 48 h)				
heptachlor epoxide (isomer B) (1024-5	7-3)				
EC50 Daphnia 1	0.00004 mg/l (LC50; 96 h)				
LC50 fish 2	5.37 mg/l (LC50; 96 h)				
Hexachlorocyclopentadiene (77-47-4)					
LC50 fish 1	0.007 mg/l (LC50; 96 h; Pimephales promelas; Flow-through system; Fresh water)				
EC50 other aquatic organisms 1 0.19 mg/l (96 h; Selenastrum capricornutum; Growth rate)					
methanol (67-56-1)					
LC50 fish 1	15400 mg/l (LC50; EPA 660/3 - 75/009; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)				
EC50 Daphnia 1	> 10000 mg/l (EC50; DIN 38412-11; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)				
LC50 fish 2	10800 mg/l (LC50; 96 h; Salmo gairdneri)				

12	12.2. Persistence and degradability		
(	Custom 508 Spike Mix_MeOH		
F	Persistence and degradability	May cause long-term adverse effects in the environment.	

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coording to Regulation (EC) No. 1907/2006 (REACI	
Persistence and degradability	Biodegradability in soil: no data available.
	Blodegradability in 30ii. No data avallabio.
dieldrin (60-57-1)	Not readily histogradable in water Ferming addiments in water. Non-degradable in the call
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Non degradable in the soil.  Adsorbs into the soil.
endrin (72-20-8)	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Non degradable in the soil. Adsorbs into the soil.
heptachlor epoxide (isomer B) (1024-57-	3)
Persistence and degradability	Forming sediments in water. Adsorbs into the soil.
Hexachlorocyclopentadiene (77-47-4)	
Persistence and degradability	Not readily biodegradable in water. Photolysis in water. Biodegradable in the soil. Adsorbs into the soil. Photolysis in the air.
methanol (67-56-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.42 g O <sub>2</sub> /g substance
ThOD	1.5 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.8 (Literature study)
12.3. Bioaccumulative potential	
Custom 508 Spike Mix_MeOH	
Bioaccumulative potential	Not established.
dieldrin (60-57-1)	
BCF fish 1	3300 (BCF)
BCF fish 2	4430 (BCF)
BCF other aquatic organisms 1	2880 (BCF; 168 h)
BCF other aquatic organisms 2	1570 (BCF; 50 h)
Log Pow	5.4 - 5.61 (Experimental value)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
endrin (72-20-8)	
BCF fish 1	15000 (BCF)
BCF fish 2	6400 (BCF)
BCF other aquatic organisms 1	500 - 2780 (BCF)
BCF other aquatic organisms 2	1920 (BCF; 50 h)
Log Pow	4.56 - 5.2 (Experimental value)
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
heptachlor epoxide (isomer B) (1024-57-	3)
BCF fish 1	14455 (BCF; 672 h)
BCF other aquatic organisms 1	1700 (BCF; 50 h)
BCF other aquatic organisms 2	10630 (BCF)
Log Pow	4.43 - 5.40
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
Hexachlorocyclopentadiene (77-47-4)	
BCF fish 1	1230 (BCF; 72 h; Leuciscus idus)
BCF other aquatic organisms 1	1090 (BCF; 24 h; Chlorella sp.)
Log Pow	3.99-5.51
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).
methanol (67-56-1)	
BCF fish 1	< 10 (BCF; 72 h; Leuciscus idus)
Log Pow	-0.77 (Experimental value; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
12.4. Mobility in soil	
alachlor (15972-60-8)	
Ecology - soil	Not toxic to bees in normal conditions of use.
	THE COME TO SOCIAL MENTION OF AGO.
dieldrin (60-57-1)	Soil contaminant Toxic to book
Ecology - soil	Soil contaminant. Toxic to bees.

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endrin (72-20-8)		
Ecology - soil	Toxic to flora. Toxic to fauna. Toxic to bees.	
Hexachlorocyclopentadiene (77-47-4)		
Surface tension	0.0375 N/m (20 °C)	
Log Koc	Koc,4265; Experimental value	
methanol (67-56-1)		
Surface tension	0.023 N/m (20 °C)	
Log Koc	Koc,PCKOCWIN v1.66; 1; Calculated value	

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

Additional information : Avoid release to the environment

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

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

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

#### SECTION 14: Transport information

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

### 14.1. UN number

 UN-No. (ADR)
 : 1992

 UN-No. (IATA)
 : 1992

 UN-No. (IMDG)
 : 1992

 UN-No. (ADN)
 : 1992

#### 14.2. UN proper shipping name

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

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

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

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

Transport document description (ADR) : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S., 3 (6.1), II, (D/E)

#### 14.3. Packing group

: 3 Class (ADR) : FT1 Classification code (ADR) Class (IATA) : 3 Class (IMDG) : 3 : 3 Class (ADN) Classification code (ADN) : FT1 Subsidiary risks (ADR) : 6.1 : 6.1 Subsidiary risks (IMDG) Hazard labels (ADR) : 3, 6.1



Hazard labels (IATA) : 3, 6.1



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Hazard labels (IMDG) : 3, 6.1



Hazard labels (ADN) : 3, 6.1



14.4. Packing group

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

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.) : 336 Classification code (ADR) : FT1

Orange plates :

336 1992

Special provision (ADR) : 274

Transport category (ADR) : 2

Tunnel restriction code (ADR) : D/E

Limited quantities (ADR) : 11

Excepted quantities (ADR) : E2

#### 14.6.2. Transport by sea

Special provision (IMDG) : 274 Limited quantities (IMDG) : 1L : E2 Excepted quantities (IMDG) Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T7 Tank special provisions (IMDG) : TP2, TP13 : F-E EmS-No. (Fire) : S-D EmS-No. (Spillage) Stowage category (IMDG) : B

Properties and observations (IMDG) : Flammable toxic liquid which is not specified by name in this class or, on account of its

characteristics, in some other class. Toxic if swallowed, by skin contact or by inhalation.

#### 14.6.3. Air transport

CAO packing instructions (IATA) : 364 CAO max net quantity (IATA) : 60L PCA packing instructions (IATA) : 352 PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 1L PCA max net quantity (IATA) : 1L : E2 PCA Excepted quantities (IATA) Special provision (IATA) : A3 ERG code (IATA) : 3HP

#### 14.6.4. Inland waterway transport

Special provision (ADN) : 274, 802 Limited quantities (ADN) : 1 L

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Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EP, EX, TOX, A

Ventilation (ADN) : VE01, VE02

Number of blue cones/lights (ADN) : 2
Carriage prohibited (ADN) : No

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

Not applicable

#### SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

#### 15.1.2. National regulations

#### Germany

Water hazard class (WGK) : 1 - slightly hazardous to water

#### 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

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