

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 07/06/2018 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	: Cyclopenta(c,d)pyrene_
Product code	: AL0-130354
Product group	: Trade product
1.2. Relevant identified uses of the s	ubstance 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 saf	iatu data shaat
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 identificatio	n
2.1. Classification of the substance of	or mixture
Classification according to Regulation (E	C) No. 1272/2008 [CLP]
Carc. 2	H351

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

Carc.Cat.3; R40 Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2.	Label elements	
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Labeling according to Regulation (EC) No.	1272/2008 [C	LP]
Hazard pictograms (CLP)		

	GHS08
Signal word (CLP)	: Warning
Hazardous ingredients	: Methylene Chloride
Hazard statements (CLP)	: H351 - Suspected of causing cancer
Precautionary statements (CLP)	 P403+P233 - Store in a well-ventilated place. Keep container tightly closed P370+P378 - In case of fire: Use media other than water to extinguish P280 - Wear protective gloves/protective clothing/eye protection/face protection P308+P313 - IF exposed or concerned: Get medical advice/attention P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

Safety Data Sheet

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

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]
Methylene Chloride		(CAS No) 75-09-2 (EC-No.) 200-838-9 (EC index no) 602-004-00-3	99.99	Carc. 2, H351
SECTION 4: First aid measures				
.1. Description of first aid measures	;			
irst-aid measures general		r give anything by mouth to an uncc cal advice/attention.	nscious person. IF	exposed or concerned: Get
irst-aid measures after inhalation	: Allow	victim to breathe fresh air. Allow th	e victim to rest.	
irst-aid measures after skin contact		ove affected clothing and wash all e arm water rinse.	xposed skin area v	vith mild soap and water, followed
irst-aid measures after eye contact	: Rinse persis	e immediately with plenty of water. C sts.	Obtain medical atte	ntion if pain, blinking or redness
irst-aid measures after ingestion	: Rinse	e mouth. Do NOT induce vomiting. C	Obtain emergency	medical attention.
.2. Most important symptoms and e lo additional information available	ffects, both	acute and delayed		
.3. Indication of any immediate med	lical attentio	n and special treatment needed		
lo additional information available				
SECTION 5: Firefighting measure	s			
.1. Extinguishing media				
Suitable extinguishing media		extinguishing media appropriate for	surrounding fire.	
Insuitable extinguishing media	: Do no	ot use a heavy water stream.		
5.2. Special hazards arising from the	substance of	or mixture		
lo additional information available				
.3. Advice for firefighters				
irefighting instructions		vater spray or fog for cooling exposication in the second se		
Protection during firefighting	: Do no	ot enter fire area without proper prot	ective equipment,	including respiratory protection.
SECTION 6: Accidental release m	easure <u>s</u>			
.1. Personal precautions, protective		and emergency procedures		
.1.1. For non-emergency personnel				
mergency procedures	: Evaci	uate unnecessary personnel.		
.1.2. For emergency responders				
Protective equipment		cleanup crew with proper protectio	n.	
mergency procedures	: Ventil	ate area.		
.2. Environmental precautions				
Prevent entry to sewers and public waters. N	otify authoriti	es if liquid enters sewers or public v	vaters.	
3.3. Methods and material for contain	nment and c	leaning up		
lethods for cleaning up	: Take	up in absorbent material. Collect sp	illage.	

See Heading 8. Exposure controls and personal protection.

Safety Data Sheet

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

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	: 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, includi	ng 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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection 8.1. Control parameters

8.1. Control parameters		
Methylene Chloride (75-09-2)		
Belgium	Limit value (mg/m³)	177 mg/m ³ (Chlorure de méthylène; Belgium; Time- weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	50 ppm (Chlorure de méthylène; Belgium; Time- weighted average exposure limit 8 h)
France	VLE (mg/m³)	356 mg/m³ (Dichlorométhane; France; Short time value; VRC: Valeur réglementaire contraignante)
France	VLE (ppm)	100 ppm (Dichlorométhane; France; Short time value; VRC: Valeur réglementaire contraignante)
France	VME (mg/m³)	178 mg/m ³ (Dichlorométhane; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
France	VME (ppm)	50 ppm (Dichlorométhane; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50 ppm (Dichloromethane (Methylene chloride); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
United Kingdom	WEL TWA (mg/m³)	350 mg/m ³ Dichloromethane; United Kingdom; Time- weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL TWA (ppm)	100 ppm Dichloromethane; United Kingdom; Time- weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (mg/m ³)	1060 mg/m ³ Dichloromethane; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (ppm)	300 ppm Dichloromethane; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)

8.2. Exposure controls

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

Appropriate engineering controls Personal protective equipment

: Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety

glasses.



- : Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.
- : Chemical goggles or safety glasses. Safety glasses.
- : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
- : Wear appropriate mask.
- : Do not eat, drink or smoke during use.

Eye protection Skin and body protection

Respiratory protection Other information

Cyclopenta(c,d)pyrene_ Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

according to Regulation (EC) No. 1907/2006 (F	REACH) with its amendment Regulation (EU) 2015/830
SECTION 9: Physical and che	emical properties
9.1. Information on basic physic	cal and chemical properties
Physical state	: Liquid
Color	: Colorless.
Odor	: characteristic.
рН	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: 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	
SECTION 10: Stability and rea	activity
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Not established.	
10.3. Possibility of hazardous rea	actions
Not established.	
10.4. Conditions to avoid	
Direct sunlight. Extremely high or low te	emperatures.
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition	products
No additional information available	
SECTION 11: Toxicological in	hformation
11.1. Information on toxicologica	al effects

Acute toxicity

: Not classified

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	: Suspected of causing cancer.	
	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	

Cyclopenta(c,d)pyrene_ Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

symptoms	
SECTION 12: Ecological information	

12.1. Toxicity

Methylene Chloride (75-09-2)		
LC50 fish 1	193 mg/l (LC50; 96 h; Pimephales promelas)	
EC50 Daphnia 1	168.2 mg/l (EC50; 48 h)	

12.2. Persistence and degradability		
Cyclopenta(c,d)pyrene_		
Persistence and degradability	Not established.	
Methylene Chloride (75-09-2)		
Persistence and degradability	Not readily biodegradable in water. Biodegradable in the soil.	
12.3. Bioaccumulative potential		
Cyclopenta(c,d)pyrene_		
Bioaccumulative potential	Not established.	
Methylene Chloride (75-09-2)		
BCF fish 1	2 - 40 (BCF)	
Log Pow	1.25 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
12.4. Mobility in soil		
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 assessmen	t	
No additional information available		
12.6. Other adverse effects		
Additional information	: Avoid release to the environment	
SECTION 13: Disposal consideration	3	
13.1. Waste treatment 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		
In accordance with ADR / RID / IMDG / IATA / AD	N	
14.1. UN number	: 2810	
UN-No. (ADR) UN-No. (IATA)	2810	
UN-No. (IMDG)	2810	
UN-No. (ADN)	: 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., 6.1, III, (E)	
14.3. Packing group		
Class (ADR)	: 6.1	
Classification code (ADR)	: T1	
07/06/0040		

Cyclopenta(c,d)pyrene_ Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

) with its amendment Regulation (EU) 2015/830
Class (IATA)	: 6.1
Class (IMDG)	: 6.1
Class (ADN)	: 6.1
Classification code (ADN)	: T1
Hazard labels (ADR)	: 6.1
	6
Division (IATA)	: 6.1
Hazard labels (IATA)	: 6.1
Hazard labels (IMDG)	: 6.1
Hazard labels (ADN)	: 6.1
14.4. Packing group	
Packing group (ADR)	: 111
Packing group (IATA)	
Packing group (IMDG)	: 111
Packing group (ADN)	: III
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
14.6. Special precautions for user	: 60
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)	
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)	: 60
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)	: 60 : T1 : 60
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)Orange plates	: 60 : T1 : <u>60</u> <u>2810</u>
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)Orange platesSpecial provision (ADR)	: 60 : T1 60 2810 : 274, 614
 14.6. Special precautions for user 14.6.1. Overland transport Hazard identification number (Kemler No.) Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) 	: 60 : T1 60 2810 : 274, 614 : 2
 14.6. Special precautions for user 14.6.1. Overland transport Hazard identification number (Kemler No.) Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) 	$ \begin{array}{c} : 60 \\ : T1 \\ : 60 \\ 2810 \\ : 274, 614 \\ : 2 \\ : E : E $
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)Orange platesSpecial provision (ADR)Transport category (ADR)Tunnel restriction code (ADR)Limited quantities (ADR)	: 60 : T1 : 60 2810 : 274, 614 : 2 : E : 5l
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 14.6. Special precautions for user 14.6.1. Overland transport Hazard identification number (Kemler No.) Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC APP 14.6.2. Transport by sea Special provision (IMDG) Limited quantities (IMDG) 	: 60 : T1 : 60 2810 : 274, 614 : 2 : E : 51 : E1 : 2X : B : 223, 274 : 5L
 14.6. Special precautions for user 14.6.1. Overland transport Hazard identification number (Kemler No.) Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC APP 14.6.2. Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) 	: 60 : T1 : 60 2810 : 274, 614 : 2 : E : 51 : 51 : 223, 274 : 5L : 21 : 223, 274
 14.6. Special precautions for user 14.6.1. Overland transport Hazard identification number (Kemler No.) Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC APP 14.6.2. Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) 	: 60 : T1 : 60 2810 : 274, 614 : 2 : E : 51 : E1 : 2X : B : $223, 274$: $5L$: $5L$: 51 : $223, 274$: $5L$: 51 : 21 : $274, 614$: 21 : $274, 614$: 21 : $274, 614$: 21 : $274, 614$: 21 : 21
 14.6. Special precautions for user 14.6.1. Overland transport Hazard identification number (Kemler No.) Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC APP 14.6.2. Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) 	: 60 : T1 : 60 2810 : 274, 614 : 2 : E : 51 : 51 : 2X : B : 223, 274 : 5 L : 223, 274 : 5 L : 9001, LP01 : JBC03
 14.6. Special precautions for user 14.6.1. Overland transport Hazard identification number (Kemler No.) Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC APP 14.6.2. Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Excepted quantities (IMDG) Excepted quantities (IMDG) Tank instructions (IMDG) 	: 60 : T1 : 60 2810 : 274, 614 : 2 : E : 51 : E1 : 2X : B : 223, 274 : 5L : E1 : 2N : B
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 14.6. Special precautions for user 14.6.1. Overland transport Hazard identification number (Kemler No.) Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC APP 14.6.2. Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Excepted quantities (IMDG) Excepted quantities (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) 	: 60 : T1 : 60 2810 : 274, 614 : 2 : E : 51 : E1 : 2X : B : 223, 274 : 5L : E1 : 20 : 10 : 21 : 10 : 21 : 23, 274 : 5L : 11 : 20 : 11 : 20 : 21 : 21

Safety Data Sheet

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

EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Toxic if swallowed, by skin contact or by inhalation.
14.6.3. Air transport	
CAO packing instructions (IATA)	: 663
CAO max net quantity (IATA)	: 220L
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)	: A3, A4, A137
ERG code (IATA)	: 6L
14.6.4. Inland waterway transport	
Special provision (ADN)	: 274, 614, 802
Limited quantities (ADN)	: 5L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP, TOX, A
Ventilation (ADN)	: VE02
Number of blue cones/lights (ADN)	: 0
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)

: 2 - 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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