

Safety Data Sheet

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

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 31/12/2017 Revision date: :

Version: 1.0

1.1. Product identifier Product form : Mixture Product name : 1,8-Dinitropyrene Standard Product code AL0-130216 Product group : Trade product Relevant identified uses of the substance or mixture and uses advised against 1.2. 1.2.1. **Relevant identified uses** Main use category : Laboratory Use Industrial/Professional use spec Industrial For professional use only 1.2.2. Uses advised against No additional information available Details of the supplier of the safety data sheet 1.3. 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 asserting to Devulation (EC) No. 1979/2009 K

Classification according to Regulation (EC) 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

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

Signal word (CLP) Hazard statements (CLP) Precautionary statements (CLP) GHS08

- : Warning
- : H351 Suspected of causing cancer
- 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 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

Safety Data Sheet

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

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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				
4.1. Description of first aid measure	S			
First-aid measures general		er give anything by mouth to an uncor cal advice/attention.	nscious person. IF	exposed or concerned: Get
First-aid measures after inhalation	: Allow	v victim to breathe fresh air. Allow the	victim to rest.	
First-aid measures after skin contact		ove affected clothing and wash all ex arm water rinse.	posed skin area wi	th mild soap and water, followed
First-aid measures after eye contact	: Rins persi	e immediately with plenty of water. O sts.	btain medical atten	tion if pain, blinking or redness
First-aid measures after ingestion	: Rins	e mouth. Do NOT induce vomiting. O	btain emergency m	edical attention.
4.2. Most important symptoms and	effects, both	acute and delayed		
No additional information available				
4.3. Indication of any immediate me	dical attentic	on and special treatment needed		
No additional information available				
SECTION 5: Firefighting measure	es			
5.1. Extinguishing media				
Suitable extinguishing media	: Use	extinguishing media appropriate for s	urrounding fire.	
Unsuitable extinguishing media	: Do n	ot use a heavy water stream.		
5.2. Special hazards arising from th	e substance	or mixture		
No additional information available				
5.3. Advice for firefighters				
Firefighting instructions		water spray or fog for cooling expose nical fire. Prevent fire-fighting water fr		
Protection during firefighting	: Do n	ot enter fire area without proper prote	ective equipment, ir	cluding respiratory protection.
SECTION 6: Accidental release n	neasures			
6.1. Personal precautions, protectiv	e equipment	and emergency procedures		
6.1.1. For non-emergency personnel				
Emergency procedures	: Evac	uate unnecessary personnel.		
6.1.2. For emergency responders				
Protective equipment	: Equi	p cleanup crew with proper protection	I.	
Emergency procedures	: Vent	ilate area.		
6.2. Environmental precautions				
Prevent entry to sewers and public waters. I	Notify authorit	ies if liquid enters sewers or public w	aters.	
6.3. Methods and material for conta				
Methods for cleaning up	: Take	up in absorbent material. Collect spi	llage.	

6.4. Reference to other sections

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, 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.	

7.3. Specific end use(s) No additional information available

9.1 Control no

SECTION 8: Exposure controls/personal protection

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.

Hand protection

Eye protection Skin and body protection

Respiratory protection Other information

1,8-Dinitropyrene Standard Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with	its amendment Regulation (EU) 2015/830		
SECTION 9: Physical and chemical properties			
9.1. Information on basic physical 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 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	S.		
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		
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		
	Deced on available data, the eleccification criteria are not mot		

Based on available data, the classification criteria are not met

: Not classified

1,8-Dinitropyrene Standard Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

EC50 Daphnia 1

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.

SECTION 12: Ecological information		
12.1. Toxicity		
Methylene Chloride (75-09-2)		
LC50 fish 1	193 mg/l (LC50; 96 h; Pimephales promelas)	

168.2 mg/l (EC50; 48 h)

12.2. Persistence and degradability		
1,8-Dinitropyrene Standard		
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		
1,8-Dinitropyrene Standard		
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 assessme		
No additional information available	11	
12.6. Other adverse effects	• · · · · · · · ·	
Additional information	: Avoid release to the environment	
SECTION 13: Disposal consideration	IS	
13.1. Waste treatment methods		
	: Dispose in a safe manner in accordance with local/national regulations.	
13.1. Waste treatment methods		
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials	: Dispose in a safe manner in accordance with local/national regulations.	
13.1. Waste treatment methods Product/Packaging disposal recommendations	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD 14.1. UN number	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD 14.1. UN number UN-No. (ADR)	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AI 14.1. UN number UN-No. (ADR) UN-No. (IATA)	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD 14.1. UN number UN-No. (ADR) UN-No. (IATA) UN-No. (IMDG) UN-No. (ADN)	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD 14.1. UN number UN-No. (ADR) UN-No. (IATA) UN-No. (IMDG) UN-No. (ADN)	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD 14.1. UN number UN-No. (ADR) UN-No. (IATA) UN-No. (IMDG) UN-No. (ADN) 14.2. UN proper shipping name	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AI 14.1. UN number UN-No. (ADR) UN-No. (IATA) UN-No. (IMDG) UN-No. (ADN) 14.2. UN proper shipping name Proper Shipping Name (ADR)	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AI 14.1. UN number UN-No. (ADR) UN-No. (IATA) UN-No. (IMDG) UN-No. (ADN) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IATA)	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD 14.1. UN number UN-No. (ADR) UN-No. (IATA) UN-No. (IMDG) UN-No. (ADN) 14.2. UN proper shipping name Proper Shipping Name (IATA) Proper Shipping Name (IMDG)	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD 14.1. UN number UN-No. (ADR) UN-No. (IATA) UN-No. (IMDG) UN-No. (ADN) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IMDG) Proper Shipping Name (ADN)	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD 14.1. UN number UN-No. (ADR) UN-No. (IATA) UN-No. (IMDG) UN-No. (ADR) Proper Shipping Name (ADR) Proper Shipping Name (IATA) Proper Shipping Name (IMDG) Proper Shipping Name (ADN) Transport document description (ADR) 14.3. Packing group	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. ON 2810 2810 2810 2810 2810 TOXIC LIQUID, ORGANIC, N.O.S. Toxic liquid, organic, n.o.s. TOXIC LIQUID, ORGANIC, N.O.S. TOXIC LIQUID, ORGANIC, N.O.S. TOXIC LIQUID, ORGANIC, N.O.S. UN 2810 TOXIC LIQUID, ORGANIC, N.O.S., 6.1, III, (E) 	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD 14.1. UN number UN-No. (ADR) UN-No. (IATA) UN-No. (IMDG) UN-No. (ADN) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Transport document description (ADR) 14.3. Packing group Class (ADR)	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. ON 2810 2810 2810 2810 210 TOXIC LIQUID, ORGANIC, N.O.S. TOXIC LIQUID, ORGANIC, N.O.S. TOXIC LIQUID, ORGANIC, N.O.S. TOXIC LIQUID, ORGANIC, N.O.S. UN 2810 TOXIC LIQUID, ORGANIC, N.O.S., 6.1, III, (E) 5 6.1	
13.1. Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AD 14.1. UN number UN-No. (ADR) UN-No. (IATA) UN-No. (IMDG) UN-No. (ADR) Proper Shipping Name (ADR) Proper Shipping Name (IATA) Proper Shipping Name (IMDG) Proper Shipping Name (ADN) Transport document description (ADR) 14.3. Packing group	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. ON 2810 2810 2810 2810 2810 TOXIC LIQUID, ORGANIC, N.O.S. Toxic liquid, organic, n.o.s. TOXIC LIQUID, ORGANIC, N.O.S. TOXIC LIQUID, ORGANIC, N.O.S. TOXIC LIQUID, ORGANIC, N.O.S. UN 2810 TOXIC LIQUID, ORGANIC, N.O.S., 6.1, III, (E) 	

1,8-Dinitropyrene Standard 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 (REACH)) 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
	Â
	6
Division (IATA)	: 6.1
Hazard labels (IATA)	: 6.1
	6
Hazard labels (IMDG)	: 6.1
	6
Hazard labels (ADN)	: 6.1
	6
14.4. Packing group	
Packing group (ADR)	: III
Packing group (IATA)	
Packing group (IATA)	
Packing group (IMDG)	: 111
Packing group (IMDG) Packing group (ADN)	
Packing group (IMDG) Packing group (ADN)	: 111
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information	: III : III
Packing group (IMDG)Packing group (ADN)14.5.Environmental hazardsOther information14.6.Special precautions for user	: III : III
Packing group (IMDG)Packing group (ADN)14.5.Environmental hazardsOther information14.6.Special precautions for user14.6.1.Overland transport	 III III No supplementary information available.
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 14.6. Special precautions for user 14.6.1. Overland transport Hazard identification number (Kemler No.)	 III III No supplementary information available. 60
Packing group (IMDG) Packing group (ADN)14.5.Environmental hazardsOther information14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)	 III III III No supplementary information available. 60 T1
Packing group (IMDG) Packing group (ADN)14.5.Environmental hazardsOther information14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)	 III III No supplementary information available. 60
Packing group (IMDG) Packing group (ADN)14.5.Environmental hazardsOther information14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)	 III III No supplementary information available. 60 T1 60
Packing group (IMDG) Packing group (ADN)14.5.Environmental hazardsOther information14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)Orange plates	 III III No supplementary information available. 60 T1 60 2810
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 14.6. Special precautions for user 14.6.1. Overland transport Hazard identification number (Kemler No.) Classification code (ADR) Orange plates Special provision (ADR)	$\begin{array}{c} & \text{III} \\ & \text{III} \\ \end{array}$ $\begin{array}{c} & \text{No supplementary information available.} \\ \end{array}$ $\begin{array}{c} & \text{60} \\ & \text{71} \\ \end{array}$ $\begin{array}{c} & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $
Packing group (IMDG) Packing group (ADN)14.5.Environmental hazardsOther information14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)Orange platesSpecial provision (ADR)Transport category (ADR)	$ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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)	$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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)	: III : III : No supplementary information available. : 60 : T1 : 60 2810 : 274, 614 : 2 : E : 51 : E1
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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	$ \begin{array}{c} \text{III} \\ \text{: III} \\ \text{: III} \\ \text{: No supplementary information available.} \\ \text{: 60} \\ \text{: T1} \\ \text{: 60} \\ \hline \textbf{2810} \\ \text{: 2810} \\ \text{: 274, 614} \\ \text{: 2} \\ \text{: E} \\ \text{: 5l} \\ \text{: 5l} \\ \text{: 5l} \\ \text{: 2X} \end{array} $
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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	$ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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)	: III : No supplementary information available. : 60 : T1 : 60 2810 : 274, 614 : 2 : 274, 614 : 2 : 5 : 5 : 51 : 2X : 8 : 223, 274
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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)	: III : No supplementary information available. : 60 : T1 : 60 2810 : 274, 614 : 2 : 274, 614 : 2 : 5 : 5 : 51 : 223, 274 : 5L
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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)	: III : No supplementary information available. : 60 : T1 : 60 2810 : 274, 614 : 2 : $274, 614$: 2 : 12 :
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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)	$ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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) IBC packing instructions (IMDG)	: II : III : No supplementary information available. : 60 : T1 : 60 2810 : 274, 614 : 2 : 274, 614 : 2 : 5 : 51 : 51 : 21 : 223, 274 : 8 : 223, 274 : 5 : 1 : 203 : 201, LP01 : BC03
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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) IBC packing instructions (IMDG) Tank instructions (IMDG)	$ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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) Tank instructions (IMDG) Tank special provisions (IMDG)	$ \begin{array}{c} 11\\ 2\\ 11\\ 11\\ 11\\ 12\\ 12\\ 12\\ 12\\ 12\\ $
Packing group (IMDG) Packing group (ADN) 14.5. Environmental hazards Other information 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) IBC packing instructions (IMDG) Tank instructions (IMDG)	$ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $

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

Copyright 2015 Phenova, Inc. License granted to make paper copies for internal use. The information contained in this Safety Data Sheet is based on our current knowledge. The information contained in this document should be used only as a guide for appropriate safety precautions and should not be considered to be all inclusive. Users should make their own investigation to determine the suitability of the information for their particular purposes. The document does not represent any guarantee of the properties of the product. Phenova, Inc. shall not be held liable for any damage resulting from the handling or use of this product. Visit the Terms and Conditions of Sale link at www.phenova.com for additional terms and conditions of sale.