

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 20/11/2017 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	: Acrolein Mix
Product code	: AL0-130206
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	e category	: Laboratory Use
Industria	l/Professional use spec	: Industrial For professional use only
Use of th	ne 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]

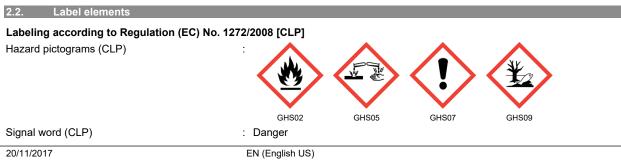
Flam. Liq. 2	H225
Acute Tox. 4 (Oral)	H302
Skin Corr. 1B	H314
Aquatic Acute 1	H400
Aquatic Chronic 3	H412

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

F; R11 T; R23/24/25 T; R39/23/24/25 C; R34 N; R50 Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available



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Hazardous ingredients	: Acrolein
Hazard statements (CLP)	 H225 - Highly flammable liquid and vapor H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage H410 - Very toxic 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 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 P370+P378 - In case of fire: Use media other than water to extinguish P391 - Collect spillage 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	

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	99.5	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370	
Acrolein (Component)	(CAS No) 107-02-8 (EC-No.) 203-453-4 (EC index no) 605-008-00-3	0.5	Flam. Liq. 2, H225 Acute Tox. 2 (Oral), H300 Acute Tox. 3 (Dermal), H311 Acute Tox. 1 (Inhalation), H330 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410	
Name	Product identifier	Specific of	concentration limits	
methanol (Component)	(CAS No) 67-56-1 (EC-No.) 200-659-6 (EC index no) 603-001-00-X		(3 = <c 10)="" 2,="" <="" h371<br="" se="" stot="">(C >= 10) STOT SE 1, H370</c>	
Acrolein (Component)	(CAS No) 107-02-8 (EC-No.) 203-453-4 (EC index no) 605-008-00-3	(C >= 0.1) \$	Skin Corr. 1B, H314	

SECTION 4: First aid measures

4.1. Description of first aid measur	es
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	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
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.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a poison center or doctor/physician.
4.2. Most important symptoms and	effects, both acute and delayed
Symptoms/effects	: Causes severe skin burns and eye damage.
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Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.
4.3. Indication of any immediate me	dical attention 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 surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from th	e 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 n	neasures
6.1. Personal precautions, protectiv	e 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. I	Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.
6.3. Methods and material for conta	
Methods for cleaning up	: Take up in absorbent material. Collect spillage.
6.4. Reference to other sections	
See Heading 8. Exposure controls and pers	onal protection.
SECTION 7: Handling and storag	e
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 formatio of vapor. No open flames. No smoking. Use only non-sparking tools.
Hygiene measures	Do not eat, drink or smoke when using this product. Wash contaminated clothing before reus Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing.
7.2. Conditions for safe storage, inc	luding any incompatibilities
Technical measures	 Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Comply with applicable regulations.
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	
SECTION 8: Exposure controls/p	

SECTION 8: Exposure controls/personal protection		
8.1. Control parameters		
Acrolein (107-02-8)		
Belgium	Short time value (mg/m³)	0.23 mg/m³ (Aldehyde acrylique; Belgium; Short time value)
Belgium	Short time value (ppm)	0.1 ppm (Aldehyde acrylique; Belgium; Short time value)
France	VLE (mg/m³)	0.25 mg/m³ (Acroléine; France; Short time value; VL: Valeur non réglementaire indicative)
France	VLE (ppm)	0.1 ppm (Acroléine; France; Short time value; VL: Valeur non réglementaire indicative)

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Acrolein (107-02-8)		
Italy - Portugal - USA ACGIH	ACGIH Ceiling (ppm)	0.1 ppm (Acrolein; USA; Momentary value; TLV - Adopted Value)
United Kingdom	WEL TWA (mg/m³)	0.23 mg/m ³ Acrylaldehyde (Acrolein); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL TWA (ppm)	0.1 ppm Acrylaldehyde (Acrolein); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (mg/m³)	0.7 mg/m³ Acrylaldehyde (Acrolein); United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (ppm)	0.3 ppm Acrylaldehyde (Acrolein); United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
methanol (67-56-1)		
EU	IOELV TWA (mg/m ³)	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/m ³ (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)
France	VME (mg/m³)	260 mg/m ³ (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/m ³ (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/m ³ 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/m ³)	333 mg/m ³ 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.

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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 face shield. Safety glasses.
Skin and body protection	: Wear suitable protective clothing. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.
SECTION 9: Physical and chem	ical properties
9.1. Information on basic physical	and chemical properties
Physical state	· Liquid

Physical state	: Liquia
Color	: Colorless.
Odor	: characteristic.
pH	: 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)	: 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

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity		
10.1. Reactivity		
Thermal decomposition generates : Corrosive vapo	ors.	
10.2. Chemical stability		
Highly flammable liquid and vapor. May form flamm	nable/explosive vapor-air mixture.	
10.3. Possibility of hazardous reactions		
Not established.		
10.4. Conditions to avoid		
Direct sunlight. Extremely high or low temperatures	s. Open flame.	
10.5. Incompatible materials		
No additional information available		
10.6. Hazardous decomposition products		
May release flammable gases. Thermal decomposition generates : Corrosive vapors.		
SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity	: Oral: Harmful if swallowed.	
Acrolein Mix		
ATE CLP (oral)	400 mg/kg body weight	
Acrolein (107-02-8)		
LC50 inhalation rat (mg/l)	0.018 mg/l/4h (Rat; Experimental value)	
ATE CLP (oral)	5 mg/kg body weight	

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Acrolein (107-02-8)			
ATE CLP (dermal)	300 mg/kg body weight		
ATE CLP (gases)	10 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			
	> 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)		
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	: Causes severe skin burns and eye damage.		
Serious eye damage/irritation	: Eye damage, category 1, implicit		
Respiratory or skin sensitization	: Not classified		
	Based on available data, the classification criteria are not met		
Germ cell mutagenicity	: Not classified		
ö	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	: Not classified		
	Based on available data, the classification criteria are not met		
Specific target organ toxicity – repeated	: Not classified		
exposure	Based on available data, the classification criteria are not met		
Aspiration hazard	: Not classified		
	Based on available data, the classification criteria are not met		
Potential Adverse human health effects and symptoms	: Harmful if swallowed.		

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - water	: Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.	
Acrolein (107-02-8)		
LC50 other aquatic organisms 1	0.007 mg/l (96 h; Xenopus laevis; Lethal; LC50; Other; Flow-through system; Fresh water)	
LC50 fish 2	0.016 - 0.08 mg/l (LC50; 96 h)	
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)	

12.2. Persistence and degradability		
Acrolein Mix		
Persistence and degradability	May cause long-term adverse effects in the environment.	
Acrolein (107-02-8)		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.	
Chemical oxygen demand (COD)	1.72 g O ₂ /g substance	
ThOD	2 g O ₂ /g substance	
BOD (% of ThOD)	0.3	

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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 ₂ /g substance
Chemical oxygen demand (COD)	1.42 g O ₂ /g substance
ThOD	1.5 g O ₂ /g substance
BOD (% of ThOD)	0.8 (Literature study)
2.3. Bioaccumulative potential	
Acrolein Mix	
Bioaccumulative potential	Not established.
Acrolein (107-02-8)	
BCF fish 1	344 (BCF; Other; 28 days; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)
Log Pow	-0.01 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
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).
2.4. Mobility in soil	
Acrolein (107-02-8)	
Surface tension	0.027 N/m (20 °C)
Log Koc	Koc,PCKOCWIN v1.66; 2.763; Calculated value; log Koc; PCKOCWIN v1.66; 0.441; Calculated value
Ecology - soil	Toxic to flora.
methanol (67-56-1)	
Surface tension	0.023 N/m (20 °C)
Log Koc	Koc,PCKOCWIN v1.66; 1; Calculated value
2.5. Results of PBT and vPvB assessme	nt
lo additional information available 2.6. Other adverse effects	
Additional information	: Avoid release to the environment
SECTION 13: Disposal consideration	IS
3.1. 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.
SECTION 14: Transport information	
n accordance with ADR / RID / IMDG / IATA / AI	DN
4.1. UN number	
JN-No. (ADR)	: 2924
JN-No. (IATA)	: 2924
IN-No. (IMDG)	: 2924
JN-No. (ADN)	: 2924
4.2. UN proper shipping name	
roper Shipping Name (ADR)	: FLAMMABLE LIQUID, CORROSIVE, N.O.S.
roper Shipping Name (IATA)	: Flammable liquid, corrosive, n.o.s.
Proper Shipping Name (IMDG)	: FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Proper Shipping Name (ADN)	: FLAMMABLE LIQUID, CORROSIVE, N.O.S.
ransport document description (ADR)	: UN 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S., 3 (8), II, (D/E), ENVIRONMENTALL HAZARDOUS
4.3. Packing group	
Class (ADR)	: 3
Classification code (ADR)	: FC
Class (IATA)	: 3
0/11/2017	EN (English US)
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Class (IMDG)	: 3
Class (ADN)	: 3
Classification code (ADN)	: FC
Subsidiary risks (ADR)	: 8
Subsidiary risks (IMDG)	: 8
Hazard labels (ADR)	: 3, 8
Hazard labels (IATA)	: 3,8
Hazard labels (IMDG)	: 3,8
Hazard labels (ADN)	: 3,8
14.4. Packing group	
Packing group (ADR)	: 11
Packing group (IATA) Packing group (IMDG)	: II : II
Packing group (ADN)	
14.5. Environmental hazards	
Dangerous for the environment	: 🔨
Other information	: No supplementary information available.
Other information 14.6. Special precautions for user	: No supplementary information available.
	: No supplementary information available.
14.6. Special precautions for user	: No supplementary information available.
14.6.Special precautions for user14.6.1.Overland transport	
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)	: 338
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)Orange plates	: 338 : FC : 338 2924
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)Orange platesSpecial provision (ADR)	: 338 : FC : 338 2924 : 274
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)Orange platesSpecial provision (ADR)Transport category (ADR)	: 338 : FC : 338 2924 : 274 : 2
14.6.Special precautions for user14.6.1.Overland transportHazard identification number (Kemler No.)Classification code (ADR)Orange platesSpecial provision (ADR)	: 338 : FC : 338 2924 : 274
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)	: 338 : FC : 338 2924 : 274 : 2 : D/E
 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) 	: 338 : FC : 338 2924 : 274 : 274 : 2 : D/E : 11
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)Excepted quantities (ADR)14.6.2.Transport by sea	$\begin{array}{c} : 338 \\ : FC \\ : 338 \\ 2924 \\ : 274 \\ : 2 \\ : D/E \\ : 11 \\ : E2 \\ \end{array}$
 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) 14.6.2. Transport by sea Special provision (IMDG) 	$ \begin{array}{c} 338 \\ 338 \\ 338 \\ 2924 \\ 2924 \\ 2924 \\ 274 \\ 2 \\ D/E \\ 1 \\ E \\ 1 \\ E \\ \end{array} $
 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) 14.6.2. Transport by sea Special provision (IMDG) Limited quantities (IMDG) 	 : 338 : FC : 338 2924 : 274 : 2 : D/E : 11 : E2 : 274 : 1L
 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) 14.6.2. Transport by sea Special provision (IMDG) 	$ \begin{array}{c} 338 \\ 338 \\ 338 \\ 2924$
 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) Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) 	$\begin{array}{c} : 338 \\ : FC \\ : 338 \\ 2924 \\ : 274 \\ : 2 \\ : D/E \\ : 11 \\ : E2 \\ \end{array}$

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Tank instructions (IMDG)	: T11
Tank special provisions (IMDG)	: TP2, TP27
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-C
Stowage category (IMDG)	: B
Properties and observations (IMDG)	: Causes burns to skin, eyes and mucous membranes.
14.6.3. Air transport	
CAO packing instructions (IATA)	: 363
CAO max net quantity (IATA)	: 5L
PCA packing instructions (IATA)	: 352
PCA Limited quantities (IATA)	: Y340
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA max net quantity (IATA)	: 1L
PCA Excepted quantities (IATA)	: E2
Special provision (IATA)	: A3
ERG code (IATA)	: 3CH
14.6.4. Inland waterway transport	
Special provision (ADN)	: 274
Limited quantities (ADN)	: 1L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1
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 ha	azard 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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