

**HEADLIGHT KLARLACK**

Creation date 04th November 2020  
Revision date Version 2.0

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

- 1.1. Product identifier**  
Substance / mixture HEADLIGHT KLARLACK  
Number mixture  
1 35163  
UFI JCA2-QDDY-U00X-J6FM
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
Mixture's intended use Varnish.  
Mixture uses advised against For professional use only.
- 1.3. Details of the supplier of the safety data sheet**  
**Supplier**  
Name or trade name RETECH, s.r.o.  
Address Vackova 1541/4, Praha 5 - Stodůlky, 155 00  
Czech Republic  
Identification number (CRN) 25018205  
VAT Reg No CZ25018205  
Phone +420327596428  
E-mail info@retech.cz  
Web address www.retech.com
- Competent person responsible for the safety data sheet**  
Name RETECH, s.r.o.  
E-mail info@retech.cz
- 1.4. Emergency telephone number**  
European emergency number: 112

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**  
**Classification of the mixture in accordance with Regulation (EC) No 1272/2008**

The mixture is classified as dangerous.

Flam. Liq. 3, H226  
STOT SE 3, H336  
Aquatic Chronic 3, H412

Full text of all classifications and hazard statements is given in the section 16.

**Most serious adverse physico-chemical effects**

Flammable liquid and vapour.

**Most serious adverse effects on human health and the environment**

May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.

**2.2. Label elements****Hazard pictogram****Signal word**

Warning



**HEADLIGHT KLARLACK**

Creation date	04th November 2020		Version	2.0	
Revision date			Version	2.0	
Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note	
Index: 607-038-00-2 CAS: 112-07-2 EC: 203-933-3 Registration number: 01-2119475112-47	2-butoxyethyl acetate	1,0-<1,5	Acute Tox. 4, H312+H332	2	
Index: 607-176-00-3 EC: 400-830-7 Registration number: 01-0000015075-76-0013	A mixture of: $\alpha$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- $\omega$ -hydroxypoly(oxyethylene); $\alpha$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- $\omega$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	0,5-<0,6	Skin Sens. 1, H317 Aquatic Chronic 2, H411		
EC: 915-687-0	Reaction mass of Decanedioic acid, bis (1,2,2,6,6-pentamethyl-4-piperidiny) ester and Decanedioic acid,(1,2,2,6,6-pentamethyl-4-piperidiny) methyl ester (CAS 41556-26-7 + CAS 82919-37-7)	0,25-<0,35	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410		
Index: 601-029-00-7 CAS: 5989-27-5 EC: 227-813-5 Registration number: 01-2119529223-47	(R) -p-mentha-1,8-diene	0,1-<0,2	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410		
Index: 601-026-00-0 CAS: 100-42-5 EC: 202-851-5 Registration number: 01-2119457861-32	styrene	0,1-<0,2	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 Repr. 2, H361d STOT RE 1, H372 (hearing organs)	1, 2	
Index: 603-064-00-3 CAS: 107-98-2 EC: 203-539-1 Registration number: 01-2119457435-35	1-methoxy-2-propanol	0,1-<0,2	Flam. Liq. 3, H226 STOT SE 3, H336	2	

**Notes**

- Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3 of Annex VI to Regulation (EC) No 1272/2008. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier who places such a substance on the market must state on the label the name of the substance followed by the words "non-stabilised".
- Substance for which exposure limits of Community for working environment exist.

Full text of all classifications and hazard statements is given in the section 16.

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

**If inhaled**

Terminate the exposure immediately; move the affected person to fresh air. In the event of issues, find medical help.

**HEADLIGHT KLARLACK**

Creation date

04th November 2020

Revision date

Version

2.0

**If on skin**

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. In the event of issues, find medical help. Wash contaminated clothing before reuse.

**If in eyes**

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. In the event of issues, find medical help.

**If swallowed**

Do not induce vomiting unless directed to do so by medical personnel. Do not provide anything by mouth if the person is unconscious or if having cramps. Provide medical treatment.

**4.2. Most important symptoms and effects, both acute and delayed****If inhaled**

May cause drowsiness or dizziness.

**If on skin**

not available

**If in eyes**

not available

**If swallowed**

not available

**4.3. Indication of any immediate medical attention and special treatment needed**

not available

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Carbon dioxide, foam, powder. Water mist.

**Unsuitable extinguishing media**

Water - full jet.

**5.2. Special hazards arising from the substance or mixture**

Container: May burst if heated. Do not breathe smoke.

**5.3. Advice for firefighters**

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water. Dispose of contaminated extinguishing water and remains after the fire in accordance with the official regulations.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Stop leak if safe to do so. Remove all ignition sources. Use non-sparking tools. Use personal protective equipment for work. Prevent contact with skin and eyes.

**6.2. Environmental precautions**

Prevent contamination of the soil and entering surface or ground water.

**6.3. Methods and material for containment and cleaning up**

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. Provide sufficient ventilation.

**6.4. Reference to other sections**

See the Section 7, 8 and 13.

**HEADLIGHT KLARLACK**

Creation date 04th November 2020  
Revision date Version 2.0

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Use only outdoors or in a well-ventilated area. Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air. Take action to prevent static discharges. Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas. Avoid release to the environment.

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

Keep only in original packaging. Store in a well-ventilated place. Keep away from sources of heating, ignition and direct sunlight.

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

not available

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

The mixture contains substances for which occupational exposure limits are set.

**European Union**

**Commission Directive 2000/39/EC**

Substance name (component)	Type	Value	Note
n-butyl acetate (CAS: 123-86-4)	OEL 8 hours	241 mg/m <sup>3</sup>	
	OEL 8 hours	50 ppm	
	OEL 15 minutes	723 mg/m <sup>3</sup>	
	OEL 15 minutes	150 ppm	
2-methoxy-1-methylethyl acetate (CAS: 108-65-6)	OEL 8 hours	275 mg/m <sup>3</sup>	Skin
	OEL 8 hours	50 ppm	
	OEL 15 minutes	550 mg/m <sup>3</sup>	
	OEL 15 minutes	100 ppm	
2-butoxyethyl acetate (CAS: 112-07-2)	OEL 8 hours	133 mg/m <sup>3</sup>	Skin
	OEL 8 hours	20 ppm	
	OEL 15 minutes	333 mg/m <sup>3</sup>	
	OEL 15 minutes	50 ppm	
1-methoxy-2-propanol (CAS: 107-98-2)	OEL 8 hours	375 mg/m <sup>3</sup>	Skin
	OEL 8 hours	100 ppm	
	OEL 15 minutes	568 mg/m <sup>3</sup>	
	OEL 15 minutes	150 ppm	

**DNEL**

(R) -p-mentha-1,8-diene

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	4.76 mg/kg	Systemic chronic effects	
Consumers	Inhalation	8.33 mg/m <sup>3</sup>	Systemic chronic effects	

**HEADLIGHT KLARLACK**

Creation date

04th November 2020

Revision date

Version

2.0

(R) -p-mentha-1,8-diene

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Dermal	0.111 mg/cm <sup>2</sup>	Local acute effects	
Workers	Inhalation	33.3 mg/m <sup>3</sup>	Systemic chronic effects	
Workers	Dermal	0.222 mg/cm <sup>2</sup>	Local acute effects	

1-methoxy-2-propanol

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	3.3 mg/kg/24hour	Systemic chronic effects	
Consumers	Inhalation	43.9 mg/m <sup>3</sup>	Systemic chronic effects	
Consumers	Dermal	18.1 mg/kg/24hour	Systemic chronic effects	
Workers	Inhalation	553.5 mg/m <sup>3</sup>	Local acute effects	
Workers	Inhalation	369 mg/m <sup>3</sup>	Systemic chronic effects	
Workers	Dermal	50.6 mg/kg/24hour	Systemic chronic effects	

2-butoxyethyl acetate

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	18 mg/kg	Systemic acute effects	
Consumers	Oral	4.3 mg/kg	Systemic chronic effects	
Consumers	Inhalation	166 mg/m <sup>3</sup>	Local acute effects	
Consumers	Inhalation	499 mg/m <sup>3</sup>	Systemic acute effects	
Consumers	Inhalation	67 mg/m <sup>3</sup>	Systemic chronic effects	
Consumers	Dermal	27 mg/kg	Systemic acute effects	
Consumers	Dermal	36 mg/kg	Systemic chronic effects	
Workers	Inhalation	333 mg/m <sup>3</sup>	Local acute effects	
Workers	Inhalation	773 mg/m <sup>3</sup>	Systemic acute effects	
Workers	Inhalation	133 mg/m <sup>3</sup>	Systemic chronic effects	
Workers	Dermal	102 mg/kg	Local acute effects	
Workers	Dermal	102 mg/kg	Systemic chronic effects	

2-methoxy-1-methylethyl acetate

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	1.67 mg/kg	Systemic chronic effects	
Consumers	Inhalation	33 mg/m <sup>3</sup>	Systemic chronic effects	
Workers	Inhalation	275 mg/m <sup>3</sup>	Systemic chronic effects	
Consumers	Dermal	54.8 mg/kg	Systemic chronic effects	
Workers	Dermal	153.5 mg/kg	Systemic chronic effects	
Consumers	Inhalation	33 mg/m <sup>3</sup>	Local chronic effects	

**HEADLIGHT KLARLACK**

Creation date 04th November 2020

Revision date

Version

2.0

hydrocarbons, C9, aromatics

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	11 mg/kg	Systemic chronic effects	
Consumers	Inhalation	32 mg/m <sup>3</sup>	Systemic chronic effects	
Consumers	Dermal	11 mg/kg	Systemic chronic effects	
Workers	Inhalation	150 mg/m <sup>3</sup>	Systemic chronic effects	
Workers	Dermal	25 mg/kg	Systemic chronic effects	

n-butyl acetate

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Inhalation	300 mg/m <sup>3</sup>	Local acute effects	
Workers	Inhalation	600 mg/m <sup>3</sup>	Local acute effects	
Consumers	Inhalation	300 mg/m <sup>3</sup>	Systemic acute effects	
Workers	Inhalation	600 mg/m <sup>3</sup>	Systemic acute effects	
Consumers	Inhalation	35.7 mg/m <sup>3</sup>	Local chronic effects	
Workers	Inhalation	300 mg/m <sup>3</sup>	Local chronic effects	
Consumers	Inhalation	35.7 mg/m <sup>3</sup>	Systemic chronic effects	
Workers	Inhalation	300 mg/m <sup>3</sup>	Systemic chronic effects	
Consumers	Oral	2 mg/kg bw/day	Systemic acute effects	
Consumers	Oral	2 mg/kg bw/day	Systemic chronic effects	
Consumers	Dermal	6 mg/kg bw/day	Systemic acute effects	
Consumers	Dermal	6 mg/kg bw/day	Systemic chronic effects	
Workers	Dermal	11 mg/kg bw/day	Systemic chronic effects	

Reaction mass of Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester and Decanedioic acid, (1,2,2,6,6-pentamethyl-4-piperidinyl) methyl ester (CAS 41556-26-7 + CAS 82919-37-7)

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	0.5 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	0.87 mg/m <sup>3</sup>	Systemic chronic effects	
Consumers	Dermal	1 mg/kg bw/day	Systemic chronic effects	
Workers	Inhalation	3.53 mg/m <sup>3</sup>	Systemic chronic effects	
Workers	Dermal	2 mg/kg bw/day	Systemic chronic effects	

**HEADLIGHT KLARLACK**

 Creation date 04th November 2020  
 Revision date Version 2.0

styrene

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	2.1 mg/kg	Systemic chronic effects	
Consumers	Inhalation	182.75 mg/m <sup>3</sup>	Local acute effects	
Consumers	Inhalation	174.25 mg/m <sup>3</sup>	Systemic acute effects	
Consumers	Inhalation	10.6 mg/m <sup>3</sup>	Systemic chronic effects	
Consumers	Dermal	343 mg/kg	Systemic chronic effects	
Workers	Inhalation	306 mg/m <sup>3</sup>	Local acute effects	
Workers	Inhalation	289 mg/m <sup>3</sup>	Systemic acute effects	
Workers	Inhalation	85 mg/m <sup>3</sup>	Systemic chronic effects	
Workers	Dermal	406 mg/kg	Systemic chronic effects	

**PNEC**

(R) -p-mentha-1,8-diene

Route of exposure	Value	Determining method
Freshwater environment	5.4 µg/l	
Seawater	0.54 µg/l	
Freshwater sediment	1.32 mg/kg	
Sea sediments	0.13 mg/kg	
Microorganisms in wastewater treatment plants	1.8 mg/l	
Food chain	3.33 mg/kg	
Soil (agricultural)	0.262 mg/kg	

1-methoxy-2-propanol

Route of exposure	Value	Determining method
Freshwater environment	10 mg/l	
Seawater	1 mg/l	
Freshwater sediment	41.6 mg/kg	
Sea sediments	4.17 mg/kg	
Water (intermittent release)	100 mg/l	
Microorganisms in wastewater treatment plants	100 mg/l	
Food chain	2.47 mg/kg	

2-butoxyethyl acetate

Route of exposure	Value	Determining method
Freshwater environment	0.304 mg/l	
Seawater	0.0304 mg/l	
Freshwater sediment	2.03 mg/kg	
Sea sediments	0.203 mg/kg	
Water (intermittent release)	0.56 mg/l	
Microorganisms in wastewater treatment plants	90 mg/l	
Food chain	60 mg/kg	
Soil (agricultural)	0.68 mg/kg	



**HEADLIGHT KLARLACK**

 Creation date 04th November 2020  
 Revision date Version 2.0

## 2-methoxy-1-methylethyl acetate

Route of exposure	Value	Determining method
Freshwater environment	0.635 mg/l	
Seawater	0.0635 mg/l	
Freshwater sediment	3.29 mg/kg	
Freshwater sediment	0.329 mg/kg	
Microorganisms in wastewater treatment plants	100 mg/l	
Soil (agricultural)	0.29 mg/kg	
Water (intermittent release)	6.35 mg/l	

## n-butyl acetate

Route of exposure	Value	Determining method
Freshwater environment	0.18 mg/l	
Seawater	0.018 mg/l	
Freshwater sediment	0.981 mg/kg of dry substance of sediment	
Water (intermittent release)	0.36 mg/l	
Soil (agricultural)	0.0903 mg/kg of dry substance of soil	
Microorganisms in wastewater treatment plants	35.6 mg/l	
Sea sediments	0.0981 mg/kg of dry substance of sediment	

Reaction mass of Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidiny) ester and Decanedioic acid, (1,2,2,6,6-pentamethyl-4-piperidiny) methyl ester (CAS 41556-26-7 + CAS 82919-37-7)

Route of exposure	Value	Determining method
Freshwater environment	0.0022 mg/l	
Seawater	0.00022 mg/l	
Freshwater sediment	1.05 mg/kg	
Sea sediments	0.11 mg/kg	
Microorganisms in wastewater treatment plants	1 mg/l	
Soil (agricultural)	0.21 mg/kg	

## styrene

Route of exposure	Value	Determining method
Freshwater environment	0.028 mg/l	
Seawater	0.0028 mg/l	
Freshwater sediment	0.614 mg/kg	
Sea sediments	0.0614 mg/kg	
Water (intermittent release)	0.04 mg/l	
Microorganisms in wastewater treatment plants	5 mg/l	
Soil (agricultural)	0.2 mg/kg	

**HEADLIGHT KLARLACK**

Creation date 04th November 2020  
Revision date Version 2.0

**8.2. Exposure controls**

Follow the usual measures intended for health protection at work and especially for good ventilation. Take off contaminated clothing. Contaminated skin should be washed thoroughly.

**Eye/face protection**

Tightly sealed goggles.

**Skin protection**

Hand protection: Protective gloves resistant to the product. Category III. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: Wear category I professional long-sleeved overalls and safety footwear.

**Respiratory protection**

Use a mask with filter when the exposition limits of the substances are exceeded or at the place with insufficient ventilation. Filter A. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. The protection provided by masks is in any case limited.

**Thermal hazard**

Not available.

**Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Appearance	
physical state	liquid at 20 °C
color	colourless
Odour	characteristic
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	128 °C
Flash point	35 °C
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	insoluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available
data not available	

**9.2. Other information**

Density	1.02 g/cm <sup>3</sup>
ignition temperature	data not available
VOC limit value	cat. B (e) : 840 g/l

**HEADLIGHT KLARLACK**

Creation date	04th November 2020	Version	2.0
Revision date			

Max. VOC content in the product in its ready to use condition 528.0 g/l

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

When used in the standard way, there is not any dangerous reaction with other substances.

**10.2. Chemical stability**

The product is stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Vapours mixed up with air can be explosive.

**10.4. Conditions to avoid**

Protect against overheating. Take action to prevent static discharges. Remove all ignition sources.

**10.5. Incompatible materials**

not available

**10.6. Hazardous decomposition products**

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

No toxicological data is available for the mixture.

**Acute toxicity**

Based on available data the classification criteria are not met.

(R) -p-mentha-1,8-diene

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	4400 mg/kg		Rat	
Dermal	LD <sub>50</sub>	>5000 mg/kg		Rabbit	

1-methoxy-2-propanol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	5300 mg/kg		Rat	
Dermal	LD <sub>50</sub>	13000 mg/kg		Rabbit	
Inhalation	LC <sub>50</sub>	54.6 mg/l	4 hour	Rat	

2-butoxyethyl acetate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	1880 mg/kg		Rat	
Dermal	LD <sub>50</sub>	1200 mg/kg		Rabbit	
Inhalation	LC <sub>50</sub>	>400 ppm	4 hour	Rat	

2-methoxy-1-methylethyl acetate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	8530 mg/kg		Rat	
Dermal	LD <sub>50</sub>	>5000 mg/kg		Rat	
Inhalation	LC <sub>50</sub>	>10.6 mg/l	6 hour	Rat	

**HEADLIGHT KLARLACK**

Creation date 04th November 2020

Revision date

Version

2.0

**HEADLIGHT KLARLACK**

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Inhalation	ATE	>20 mg/l			
Dermal	ATE	>2000 mg/kg			

## hydrocarbons, C9, aromatics

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	>8 ml/kg bw		Rat	
Dermal	LD <sub>50</sub>	>3160 mg/kg		Rabbit	
Inhalation	LC <sub>50</sub>	>6193 mg/m <sup>3</sup>		Rat	

## n-butyl acetate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	>6400 mg/kg		Rat	
Dermal	LD <sub>50</sub>	>5000 mg/kg		Rabbit	
Inhalation	LC <sub>50</sub>	21.1 mg/l	4 hour	Rat	

## Reaction mass of Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidiny) ester and Decanedioic acid, (1,2,2,6,6-pentamethyl-4-piperidiny) methyl ester (CAS 41556-26-7 + CAS 82919-37-7)

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	>3230 mg/kg		Rat	

## styrene

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	5000 mg/kg		Rat	
Dermal	LD <sub>50</sub>	>2000 mg/kg		Rat	
Inhalation	LC <sub>50</sub>	11.8 mg/kg	4 hour	Rat	

**Skin corrosion/irritation**

Based on available data the classification criteria are not met.

**Serious eye damage/irritation**

Based on available data the classification criteria are not met.

**Respiratory or skin sensitisation**

May cause an allergic skin reaction.

**Germ cell mutagenicity**

Based on available data the classification criteria are not met.

**Carcinogenicity**

Based on available data the classification criteria are not met.

**Reproductive toxicity**

Based on available data the classification criteria are not met.

**Toxicity for specific target organ - single exposure**

Possible irritation of airways. May cause drowsiness or dizziness.

**HEADLIGHT KLARLACK**

Creation date

04th November 2020

Revision date

Version

2.0

**Toxicity for specific target organ - repeated exposure**

Based on available data the classification criteria are not met.

**Aspiration hazard**

Based on available data the classification criteria are not met.

**SECTION 12: Ecological information**
**12.1. Toxicity**
**Acute toxicity**

Harmful to aquatic life with long lasting effects.

(R) -p-mentha-1,8-diene

Parameter	Value	Time of exposure	Species	Environment
LC <sub>50</sub>	35 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC <sub>50</sub>	69.6 mg/l	48 hour	Daphnia (Daphnia pulex)	
EC <sub>50</sub>	150 mg/l	72 hour	Algae (Desmodesmus subspicatus)	

2-butoxyethyl acetate

Parameter	Value	Time of exposure	Species	Environment
LC <sub>50</sub>	28 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC <sub>50</sub>	37 mg/l	48 hour	Daphnia (Daphnia magna)	
EC <sub>50</sub>	>100 mg/l	72 hour	Algae (Scenedesmus subspicatus)	

2-methoxy-1-methylethyl acetate

Parameter	Value	Time of exposure	Species	Environment
LC <sub>50</sub>	100 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC <sub>50</sub>	450 mg/l	48 hour	Daphnia (Daphnia magna)	

hydrocarbons, C9, aromatics

Parameter	Value	Time of exposure	Species	Environment
EC <sub>50</sub>	3.2 mg/l	48 hour	Daphnia (Daphnia magna)	
EC <sub>50</sub>	2.9 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	
LC <sub>50</sub>	9.2 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	

n-butyl acetate

Parameter	Value	Time of exposure	Species	Environment
LC <sub>50</sub>	18 mg/l	96 hour	Fishes (Pimephales promelas)	

**HEADLIGHT KLARLACK**

Creation date 04th November 2020

Revision date

Version

2.0

n-butyl acetate

Parameter	Value	Time of exposure	Species	Environment
EC <sub>50</sub>	44 mg/l	48 hour	Daphnia (Daphnia magna)	
EC <sub>50</sub>	397 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	

Reaction mass of Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidiny) ester and Decanedioic acid, (1,2,2,6,6-pentamethyl-4-piperidiny) methyl ester (CAS 41556-26-7 + CAS 82919-37-7)

Parameter	Value	Time of exposure	Species	Environment
EC <sub>50</sub>	4 mg/l	48 hour	Daphnia (Daphnia magna)	

styrene

Parameter	Value	Time of exposure	Species	Environment
LC <sub>50</sub>	4.02 mg/l	96 hour	Fishes (Pimephales promelas)	
EC <sub>50</sub>	4.7 mg/l	48 hour	Daphnia (Daphnia magna)	
EC <sub>50</sub>	4.9 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	

**Chronic toxicity**

2-methoxy-1-methylethyl acetate

Parameter	Value	Time of exposure	Species	Environment
NOEC	47.5 mg/l	14 day	Fishes (Oncorhynchus mykiss)	
NOEC	>100 mg/l	21 day	Daphnia (Daphnia magna)	
NOEC	>1000 mg/l	96 hour	Algae (Selenastrum capricornutum)	

Reaction mass of Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidiny) ester and Decanedioic acid, (1,2,2,6,6-pentamethyl-4-piperidiny) methyl ester (CAS 41556-26-7 + CAS 82919-37-7)

Parameter	Value	Time of exposure	Species	Environment
NOEC	1 mg/l		Daphnia (Daphnia magna)	

**12.2. Persistence and degradability**
**Biodegradability**

(R) -p-mentha-1,8-diene

Parameter	Value	Time of exposure	Environment	Result
	0.1-100 mg/l			Biodegradable

**HEADLIGHT KLARLACK**

Creation date 04th November 2020

Revision date Version 2.0

1-methoxy-2-propanol

Parameter	Value	Time of exposure	Environment	Result
	1000-10000 mg/l			Biodegradable

2-butoxyethyl acetate

Parameter	Value	Time of exposure	Environment	Result
				Biodegradable

2-methoxy-1-methylethyl acetate

Parameter	Value	Time of exposure	Environment	Result
	>10000 mg/l			Biodegradable
	83 %	28 day		

n-butyl acetate

Parameter	Value	Time of exposure	Environment	Result
	1000-10000 mg/l			Biodegradable
	83 %	28 day		

styrene

Parameter	Value	Time of exposure	Environment	Result
	320 mg/l			Biodegradable

Not available.

**12.3. Bioaccumulative potential**

(R) -p-mentha-1,8-diene

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
Kow	4.38				
BCF	1022				

1-methoxy-2-propanol

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
Kow	<1 mg/kg				

2-butoxyethyl acetate

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
Kow	1.51				
BCF	<4				

2-methoxy-1-methylethyl acetate

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
Kow	1.2				

**HEADLIGHT KLARLACK**

Creation date	04th November 2020	Version	2.0
Revision date			

n-butyl acetate

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
Kow	2.3				
BCF	15.3				

styrene

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
Kow	2.96				
BCF	74				

Not available.

**12.4. Mobility in soil**

n-butyl acetate

Parameter	Value	Environment	Surrounding temperature
K(soil-water)	<3		

styrene

Parameter	Value	Environment	Surrounding temperature
Ksoil-water	2.55		

Not available.

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

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

**12.6. Other adverse effects**

Not available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste.

**Waste management legislation**

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

**Waste type code**

08 01 11 waste paint and varnish containing organic solvents or other hazardous substances \*

**Packaging waste type code**

15 01 10 packaging containing residues of or contaminated by hazardous substances \*

(\*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

**SECTION 14: Transport information**

**14.1. UN number**

UN 1263

**14.2. UN proper shipping name**

PAINT



**HEADLIGHT KLARLACK**

Creation date	04th November 2020	Version	2.0
Revision date			

**14.3. Transport hazard class(es)**

3 Flammable liquids

**14.4. Packing group**

III - substances presenting low danger

**14.5. Environmental hazards**

No.

**14.6. Special precautions for user**

Reference in the Sections 4 to 8.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not available

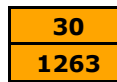
**Additional information**

Special instructions: A3, A72, A192

Hazard identification No.

UN number

Safety signs



3

**Road transport - ADR**

Limited quantities

5 L

Transport category

3

Tunnel restriction code

(D/E)

**Air transport - ICAO/IATA**

Packaging instructions passenger

355

Cargo packaging instructions

366

**Marine transport - IMDG**

EmS (emergency plan)

F-E, S-E

Marine Pollutant

No

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

**15.2. Chemical safety assessment**

not available

**SECTION 16: Other information****A list of standard risk phrases used in the safety data sheet**

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.



**HEADLIGHT KLARLACK**

Creation date	04th November 2020	Version	2.0
Revision date			

LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Repr.	Reproductive toxicity
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

**Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

**Recommended restrictions of use**

not available

**Information about data sources used to compile the Safety Data Sheet**

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

**The changes (which information has been added, deleted or modified)**

The version 2.0 replaces the SDS version from 30th July 2015. Changes were made in sections 2, 3, 8, 9, 11, 12, 15 and 16.

**Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.