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

### 1.1. Product identifier

**Trade name or designation of the mixture** AMBERKLENE LO30

**Registration number** -

**Synonyms** None.

**Product code** UDS000177AE

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Cleaners - Heavy duty

**Uses advised against** None known.

### 1.3. Details of the supplier of the safety data sheet

**Company name** CRC Industries UK Ltd.  
**Address** Wylde Road  
 Castlefield Industrial Estate  
 TA6 4DD Bridgwater Somerset  
 United Kingdom  
**Telephone** +44 1278 727200  
**Fax** +44 1278 425644  
**E-mail** hse.uk@crcind.com  
**Website** www.crcind.com

**Company name** CRC Industries Europe bv  
**Address** Touwslagerstraat 1  
 9240 Zele  
 Belgium  
**Telephone** +32(0)52/45.60.11  
**Fax** +32(0)52/45.00.34  
**E-mail** hse@crcind.com  
**Website** www.crcind.com

**1.4. Emergency telephone number** Tel.:(+44)(0)1278 72 7200 (office hours: 9-17h GMT)

**Austria National Poisons Information Centre** +431 406 4343 (Available 24 hours a day.)

**Belgium National Poisons Control Center** 070 245 245 (Available 24 hours a day.)

**Bulgaria National Toxicological Information Centre** +359 2 9154233 (Available 24 hours a day.)

**Czech Republic National Poisons Information Centre** +420 224 919 293, or +420 224 915 402 (Hours of operation not provided.)

**Denmark National Poisons Control Center** +45 82 12 12 12 (Available 24 hours a day.)

**Estonia National Poisons Information Centre** 16662 or abroad: (+372) 626 9390 (Monday 9:00AM to Saturday 9:00AM (closed on Sundays and on national holidays))

<b>Finland National Poison Information Center</b>	(09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day.)
<b>France National Poisons Control Center</b>	ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day.)
<b>Hungary National Emergency Phone Number</b>	36 80 20 11 99 (Available 24 hours a day.)
<b>Lithuania Neatidėliotina informacija apsinuodijus</b>	+370 5 236 20 52 or +37068753378 (Hours of operation not provided.)
<b>Malta Accident and Emergency Department</b>	2545 4030 (Hours of operation not provided.)
<b>Netherlands National Poisons Information Center (NVIC)</b>	030-274 88 88 (Only for the purpose of informing medical personnel in cases of acute intoxications)
<b>Norway Norwegian Poison Information Center</b>	22 59 13 00 (Available 24 hours a day.)
<b>Portugal Poison Centre</b>	800 250 250 (Available 24 hours a day.)
<b>Romania Număr de telefon care poate fi apelat în caz de urgență:</b>	021 5992300, int. 291 Spitalul Clinic de Urgență București: spital@urgentafloreasca.ro
<b>Romania</b>	0265 212111, 0265 211292, 0265 217235 Spitalul Clinic Județean de Urgență Târgu Mureș; secretariat@spitjudms.ro
<b>Slovakia National Toxicological Information Centre</b>	+421 2 5477 4166 (Available 24 hours a day.)
<b>Sweden National Poison Information Center</b>	112 - and ask for Poison Information (Available 24 hours a day.)
<b>Switzerland Tox Info Suisse</b>	145 (Available 24 hours a day.)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Physical hazards

Aerosols	Category 1	H222 - Extremely flammable aerosol. H229 - Pressurized container: May burst if heated.
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##### Health hazards

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.

##### Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

##### Hazard pictograms



##### Signal word

Danger

##### Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H315	Causes skin irritation.

H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

## Precautionary statements

### Prevention

P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn, even after use.  
P261 Avoid breathing mist/vapours.  
P271 Use only outdoors or in a well-ventilated area.

### Response

Not assigned.

### Storage

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

### Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Supplemental label information** According to Regulation (EC) No. 648/2004 on Detergents, as amended; Contains: >30% aliphatic hydrocarbons.

**2.3. Other hazards** This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	60 - 100	- 921-024-6	01-2119475514-35	-	
<b>Classification:</b> Flam. Liq. 2;H225, Skin Irrit. 2;H315, STOT SE 3;H336, Asp. Tox. 1;H304, Aquatic Chronic 2;H411					
n-hexane	<5	110-54-3 203-777-6	01-2119480412-44	601-037-00-0	#
<b>Classification:</b> Flam. Liq. 2;H225, Skin Irrit. 2;H315, Repr. 2;H361f, STOT SE 3;H336, STOT RE 2;H373, Asp. Tox. 1;H304, Aquatic Chronic 2;H411					
<b>Specific Concentration Limits:</b> STOT RE 2;H373: C >= 5 %					

#### List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).  
M: M-factor  
PBT: persistent, bioaccumulative and toxic substance.  
vPvB: very persistent and very bioaccumulative substance.  
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition comments** The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

#### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 4.1. Description of first aid measures

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison centre or doctor/physician if you feel unwell.  
**Skin contact** Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.  
**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.  
**Ingestion** In the unlikely event of swallowing contact a physician or poison control centre. Rinse mouth.

**4.2. Most important symptoms and effects, both acute and delayed** May cause drowsiness or dizziness. Headache. Nausea, vomiting. Skin irritation. May cause redness and pain.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

<b>General fire hazards</b>	Extremely flammable aerosol.
<b>5.1. Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>5.2. Special hazards arising from the substance or mixture</b>	Contents under pressure. Pressurised container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
<b>5.3. Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Special fire fighting procedures</b>	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapour pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.

## SECTION 6: Accidental release measures

<b>6.1. Personal precautions, protective equipment and emergency procedures</b>	
<b>For non-emergency personnel</b>	Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.
<b>For emergency responders</b>	Keep unnecessary personnel away. Avoid breathing mist/vapours. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>6.2. Environmental precautions</b>	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
<b>6.3. Methods and material for containment and cleaning up</b>	Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. The product is immiscible with water and will spread on the water surface. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
<b>6.4. Reference to other sections</b>	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

<b>7.1. Precautions for safe handling</b>	Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
<b>7.2. Conditions for safe storage, including any incompatibilities</b>	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Storage class (TRGS 510): 2B (Aerosol dispensers and lighters)
<b>7.3. Specific end use(s)</b>	Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

Austria Components	Type	Value
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	TWA (MAK)	200 ppm

**Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001**

Components	Type	Value
n-hexane (CAS 110-54-3)	MAK	72 mg/m3
		20 ppm
	STEL	288 mg/m3
		80 ppm

**Belgium. Exposure Limit Values**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3
		20 ppm

**Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3
		20 ppm

**Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09**

Components	Type	Value
n-hexane (CAS 110-54-3)	MAC	72 mg/m3
		20 ppm

**Czech Republic. OELs. Government Decree 361**

Components	Type	Value
n-hexane (CAS 110-54-3)	Ceiling	200 mg/m3
	TWA	70 mg/m3

**Denmark. Exposure Limit Values**

Components	Type	Value
n-hexane (CAS 110-54-3)	TLV	72 mg/m3
		20 ppm

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3
		20 ppm

**Finland. Workplace Exposure Limits**

Components	Type	Value
n-hexane (CAS 110-54-3)	STEL	2300 mg/m3
		630 ppm
	TWA	72 mg/m3
		20 ppm

**France**

Components	Type	Value
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	STEL	1500 mg/m3
	TWA	1000 mg/m3

**France. OELs. Occupational Exposure Limits as Prescribed by Art. R.4412-149 of Labor Code, as amended**

Components	Type	Value
n-hexane (CAS 110-54-3)	VME	72 mg/m3
		20 ppm

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Components	Type	Value	Form
n-hexane (CAS 110-54-3)	VLE	1500 mg/m3	Vapour.

**Regulatory status:** Indicative limit (VL)

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Components	Type	Value	Form
	VME	72 mg/m3	
<b>Regulatory status:</b>	Regulatory binding (VRC)		
		20 ppm	
<b>Regulatory status:</b>	Regulatory binding (VRC)		

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	180 mg/m3 50 ppm

**Germany - TRGS 900**

Components	Type	Value
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclic s, < 5% n-hexane	TWA	700 mg/m3

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace**

Components	Type	Value
n-hexane (CAS 110-54-3)	AGW	180 mg/m3 50 ppm

**Greece. OELs (Decree No. 90/1999, as amended)**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3 20 ppm

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3

**Iceland. OELs. Regulation 154/1999 on occupational exposure limits**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	90 mg/m3 25 ppm

**Ireland. Occupational Exposure Limits**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3 20 ppm

**Italy. Occupational Exposure Limits**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3 20 ppm

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Components	Type	Value
n-hexane (CAS 110-54-3)	STEL	300 mg/m3
	TWA	72 mg/m3 20 ppm

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3 20 ppm

**Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A**

Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3

**Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A**

Components	Type	Value
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20 ppm

**Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)**

Components	Type	Value
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n-hexane (CAS 110-54-3)	TWA	72 mg/m3
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20 ppm

**Netherlands. OELs (binding)**

Components	Type	Value
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n-hexane (CAS 110-54-3)	STEL	144 mg/m3
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TWA

72 mg/m3

**Norway. Administrative Norms for Contaminants in the Workplace**

Components	Type	Value
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n-hexane (CAS 110-54-3)	TLV	72 mg/m3
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20 ppm

**Poland. Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817**

Components	Type	Value
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n-hexane (CAS 110-54-3)	TWA	72 mg/m3
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**Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)**

Components	Type	Value
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n-hexane (CAS 110-54-3)	TWA	72 mg/m3
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20 ppm

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)**

Components	Type	Value
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n-hexane (CAS 110-54-3)	TWA	50 ppm
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**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

Components	Type	Value
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n-hexane (CAS 110-54-3)	TWA	72 mg/m3
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20 ppm

**Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents**

Components	Type	Value
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n-hexane (CAS 110-54-3)	STEL	140 mg/m3
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40 ppm

TWA

72 mg/m3

20 ppm

**Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

Components	Type	Value
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n-hexane (CAS 110-54-3)	TWA	72 mg/m3
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20 ppm

**Spain. Occupational Exposure Limits**

Components	Type	Value
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n-hexane (CAS 110-54-3)	TWA	72 mg/m3
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20 ppm

**Sweden**

Components	Type	Value
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Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclic s, < 5% n-hexane	STEL (STV)	300 ppm
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Sweden Components	Type	Value
	TWA	200 ppm
Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)		
Components	Type	Value
n-hexane (CAS 110-54-3)	Ceiling	180 mg/m3
		50 ppm
	TWA	72 mg/m3
		25 ppm
Switzerland		
Components	Type	Value
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclic s,< 5% n-hexane	TWA	500 ppm
Switzerland. SUVA Grenzwerte am Arbeitsplatz		
Components	Type	Value
n-hexane (CAS 110-54-3)	STEL	1440 mg/m3
		400 ppm
	TWA	180 mg/m3
		50 ppm
UK. EH40 Workplace Exposure Limits (WELs)		
Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3
		20 ppm
EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU		
Components	Type	Value
n-hexane (CAS 110-54-3)	TWA	72 mg/m3
		20 ppm

#### Biological limit values

<b>Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)</b>				
Components	Value	Determinant	Specimen	Sampling Time
n-hexane (CAS 110-54-3)	150 µg/l	n-hexane	Blood	*
	0,2 mg/g	2-Hexanol	Creatinine in urine	*
	0,22 mmol/mol	2-Hexanol	Creatinine in urine	*
	40 ppm	n-hexane	End-exhaled air	*
	1,74 µmol/l	n-hexane	Blood	*
	1,66 µmol/l	n-hexane	End-exhaled air	*

\* - For sampling details, please see the source document.

<b>France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)</b>				
Components	Value	Determinant	Specimen	Sampling Time
n-hexane (CAS 110-54-3)	5 mg/g	2,5-Hexanedione	Creatinine in urine	*

\* - For sampling details, please see the source document.



**Germany. TRGS 903, BAT List (Biological Limit Values)**

Components	Value	Determinant	Specimen	Sampling Time
n-hexane (CAS 110-54-3)	5 mg/l	2,5-Hexandion plus 4,5-Dihydroxy-2-hexanon (nach Hydrolyse)	Urine	*

\* - For sampling details, please see the source document.

**Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices**

Components	Value	Determinant	Specimen	Sampling Time
n-hexane (CAS 110-54-3)	18 µmol/l	hexane-2,5-dion	Urine	*
	2 mg/l	hexane-2,5-dion	Urine	*

\* - For sampling details, please see the source document.

**Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2**

Components	Value	Determinant	Specimen	Sampling Time
n-hexane (CAS 110-54-3)	3 mg/g	2,5-hexanedione and 4,5-dihydroxy-2-hexanone	Creatinine in urine	*
	5 mg/l	2,5-hexanedione and 4,5-dihydroxy-2-hexanone	Urine	*

\* - For sampling details, please see the source document.

**Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4**

Components	Value	Determinant	Specimen	Sampling Time
n-hexane (CAS 110-54-3)	0,2 mg/l	2,5-Hexanodiona, sin hidrólisis	Urine	*

\* - For sampling details, please see the source document.

**Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)**

Components	Value	Determinant	Specimen	Sampling Time
n-hexane (CAS 110-54-3)	5 mg/l	2,5-Hexandion plus 4,5-Dihydroxy-2-hexanon	Urine	*

\* - For sampling details, please see the source document.

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)****General population**

Components	Value	Assessment factor	Notes
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (CAS -)			
Long-term, Systemic, Dermal	699 mg/kg bw/day		
Long-term, Systemic, Inhalation	608 mg/m <sup>3</sup>		
Long-term, Systemic, Oral	699 mg/kg bw/day		

**Workers**

Components	Value	Assessment factor	Notes
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (CAS -)			
Long-term, Systemic, Dermal	773 mg/kg bw/day		
Long-term, Systemic, Inhalation	2035 mg/m <sup>3</sup>		

**Predicted no effect concentrations (PNECs)** Not available.

**Exposure guidelines****Croatia ELVs: Skin designation**

n-hexane (CAS 110-54-3) Can be absorbed through the skin.

**Czech Republic PELs: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

**Finland Exposure Limit Values: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

**Hungary OELs: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

**Ireland Exposure Limit Values: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

**Portugal VLEs Norm on Occupational Exposure: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

**Switzerland SUVA Limit Values at the Workplace: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

**8.2. Exposure controls****Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

**Individual protection measures, such as personal protective equipment****General information**

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection**

Wear safety glasses with side shields (or goggles). Use eye protection conforming to EN 166.

**Skin protection****- Hand protection**

When handling the product wear chemical-resistant gloves (standard EN 374). The breakthrough time of the glove should be longer than the total duration of product use. If work lasts longer than the breakthrough time, gloves should be changed part-way through. Nitrile gloves are recommended. Suitable gloves can be recommended by the glove supplier.

**- Other**

Wear appropriate chemical resistant clothing.

**Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respirator with organic vapour cartridge and full facepiece. (Filter type A)

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls**

Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

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

Liquid.

**Form**

Aerosol.

**Colour**

Colourless.

**Odour**

Characteristic odor.

**Melting point/freezing point**

Not available.

**Boiling point or initial boiling point and boiling range**

88 °C (190,4 °F)

**Flammability**

Not available.

**Upper/lower flammability or explosive limits**

Explosive limit - lower ( %) 1 %

Explosive limit – upper (%) 8 %

**Flash point**

-12,0 °C (10,4 °F)

**Auto-ignition temperature**

367 °C (692,6 °F)

**Decomposition temperature**

Not available.

**pH**

Not applicable.

**Kinematic viscosity**

Not available.

<b>Solubility</b>	
<b>Solubility (water)</b>	Immiscible with water
<b>Partition coefficient (n-octanol/water) (log value)</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Density and/or relative density</b>	
<b>Relative density</b>	0,72 g/cm <sup>3</sup>
<b>Vapour density</b>	Not available.
<b>Particle characteristics</b>	Not available.

## 9.2. Other information

**9.2.1. Information with regard to physical hazard classes** No relevant additional information available.

## 9.2.2. Other safety characteristics

<b>Evaporation rate</b>	4,2 (n-butyl acetate=1)
<b>Viscosity</b>	0,61 mm <sup>2</sup> /s

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong oxidising agents.
<b>10.6. Hazardous decomposition products</b>	Carbon oxides.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

<b>Inhalation</b>	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

**Symptoms** May cause drowsiness or dizziness. Headache. Nausea, vomiting. Skin irritation. May cause redness and pain.

### 11.1. Information on toxicological effects

**Acute toxicity** Based on available data, the classification criteria are not met.

Components	Species	Test Results
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	2920 mg/kg bw/day, 24 h
<b>Inhalation</b>		
LC50	Rat	25200 mg/m <sup>3</sup> , 4 h
<b>Oral</b>		
LD50	Rat	5840 mg/kg bw/day
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Respiratory sensitisation</b>	Based on available data, the classification criteria are not met.	
<b>Skin sensitisation</b>	Based on available data, the classification criteria are not met.	
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.	
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.	

**Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)**

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<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - single exposure</b>	May cause drowsiness or dizziness.
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Mixture versus substance information</b>	Not available.

**11.2. Information on other hazards**

<b>Endocrine disrupting properties</b>	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
<b>Other information</b>	Not available.

**SECTION 12: Ecological information**

**12.1. Toxicity** Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane			
Aquatic			
Acute			
Algae	EC50	Algae	> 30 - < 100 mg/l, 72 h
Crustacea	EC50	Daphnia	3 mg/l, 48 h
Fish	LC50	Fish	11,4 mg/l, 96 h

**12.2. Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

**12.3. Bioaccumulative potential**

<b>Partition coefficient n-octanol/water (log Kow)</b>	
n-hexane	3,9

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** No data available.

**12.5. Results of PBT and vPvB assessment** This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

**12.6. Endocrine disrupting properties** The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**12.7. Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.  
GWP: 1

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

14.1. UN number	UN1950
14.2. UN proper shipping name	AEROSOLS, flammable
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	Not assigned.
Label(s)	2.1
Hazard No. (ADR)	Not assigned.
Tunnel restriction code	D
ADR/RID - Classification code:	5F
14.4. Packing group	Not assigned.
14.5. Environmental hazards	Yes
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

### IATA

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	Not assigned.
14.4. Packing group	Not assigned.
14.5. Environmental hazards	Yes
ERG Code	10L
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

### IMDG

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable, Marine pollutant
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	Not assigned.
14.4. Packing group	Not assigned.
14.5. Environmental hazards	
Marine pollutant	Yes
EmS	F-D, S-U
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

14.7. Maritime transport in bulk according to IMO instruments

Not established.

ADR; IATA; IMDG





## SECTION 15: Regulatory information

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

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### Authorisations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

#### Other EU regulations

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

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#### Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

#### National regulations

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

#### List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).

ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).

CAS: Chemical Abstract Service.

Ceiling: Short Term Exposure Limit Ceiling value.

CEN: European Committee for Standardization.

CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.  
 GWP: Global Warming Potential.  
 IATA: International Air Transport Association.  
 IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.  
 IMDG: International Maritime Dangerous Goods.  
 MAC: Maximum Allowed Concentration.  
 MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG).  
 MARPOL: International Convention for the Prevention of Pollution from Ships.  
 PBT: Persistent, bioaccumulative and toxic.  
 REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals).  
 RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).  
 RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.  
 STEL: Short term exposure limit.  
 TLV: Threshold Limit Value.  
 TWA: Time Weighted Average.  
 VLE: Exposure Limit Value.  
 VME: Exposure Average Value.  
 VOC: Volatile organic compounds.  
 vPvB: Very persistent and very bioaccumulative.  
 STEL: Short-term Exposure Limit.

## References

### Information on evaluation method leading to the classification of mixture

### Full text of any statements, which are not written out in full under sections 2 to 15

Not available.

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

H225 Highly flammable liquid and vapour.  
 H304 May be fatal if swallowed and enters airways.  
 H315 Causes skin irritation.  
 H336 May cause drowsiness or dizziness.  
 H361f Suspected of damaging fertility.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H411 Toxic to aquatic life with long lasting effects.

## Revision information

## Training information

## Disclaimer

None.

Follow training instructions when handling this material.

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