

SAFETY DATA SHEET

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

1.1. Product identifier	
Trade name or designation of the mixture	BRAKLEEN PRO
Synonyms	None.
Product code	BDS001856AE
Issue date	17-July-2020
Version number	03
Revision date	14-September-2020
Supersedes date	04-August-2020
1.2. Relevant identified uses of t	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	e safety data sheet
Company name	CRC Industries Europe bvba
Address	Touwslagerstraat 1
	9240 Zele
Talankana	Belgium
Telephone Fax	+32(0)52/45.60.11 +32(0)52/45.00.34
E-mail	hse@crcind.com
Website	www.crcind.com
1.4. Emergency telephone	Tel.: +32(0)52/45.60.11 (office hours)
number	
General in EU	112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Austria National Poisons Information Centre	+431 406 4343 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Belgium National Poisons Control Center	070 245 245 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Bulgaria National Toxicological Information Center	+359 2 9154233 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Czech Republic National Poisons Information Centre	+420 224 919 293, or +420 224 915 402 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
Denmark National Poisons Control Center	+45 82 12 12 12 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
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). SDS/Product information may not be available for the Emergency Service.)
Finland National Poison Information Center	(09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
France National Poisons Control Center	ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Hungary National Emergency Phone Number	36 80 20 11 99 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Lithuania Neatidėliotina informacija apsinuodijus	+370 5 236 20 52 or +37068753378 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
Malta Accident and Emergency Department	2545 4030 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

Netherlands National Poisons Information Center (NVIC)	030-274 88 88 (Only for the purpose of informing medical personnel in cases of acute intoxications)
Norway Norwegian Poison Information Center	22 59 13 00 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Romania Biroul RSI si Informare Toxicologica	021.318.36.06 (Available 8:00AM-3:00PM. SDS/Product information may not be available for the Emergency Service.)
Slovakia National Toxicological Information Center	+421 2 5477 4166 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Sweden National Poison Information Center	112 - and ask for Poison Information (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

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.
Health hazards		
Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye 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.

Hazard summary

Aerosol CONTENTS UNDER PRESSURE.

Pressurised container may explode when exposed to heat or flame. May cause drowsiness or dizziness. Causes serious eye irritation. Causes skin irritation. Dangerous for the environment if discharged into watercourses. Occupational exposure to the substance or mixture may cause adverse health effects.

2.2. Label elements

Contains:

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

Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane, Hydrocarbons, C7, n-alkanes,isoalkanes, cyclic

Hazard pictograms

Signal word	Danger
Hazard statements	
H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye 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/sparks/open flames/hot surfaces No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurised container: 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 available.
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 related regulations).
Supplemental label information	Regulation (EC) No 648/2004 on detergents: aliphatic hydrocarbons > 30 $\%$
	Perfumes
2.3. Other hazards	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

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 n-hexane	25 - 50 ,< 5%	EC921-024-6 -	01-2119475514-35	-	
Class		2;H225, Asp. Tox. 1; quatic Chronic 2;H41	H304, Skin Irrit. 2;H315, ST 1	OT SE	
Hydrocarbons, C7, n-alkanes,isoalkanes, cyclic	25 - 50	EC927-510-4 -	01-2119475515-33	-	
Class		2;H225, Asp. Tox. 1; quatic Chronic 2;H41	H304, Skin Irrit. 2;H315, ST 1	OT SE	
acetone; propan-2-one; prop	anone 5 - 10	67-64-1 200-662-2	01-2119471330-49-xxxx	606-001-00-8	#
Class	ification: Flam. Liq.	2;H225, Eye Irrit. 2;H	1319, STOT SE 3;H336		
Carbon dioxide	5 - 10	124-38-9 204-696-9	Exempt	-	#
Class	ification: Press. Gas	s;H280			
Propan-2-ol; Isopropyl alcoh Isopropanol	ol; 5 - 10	67-63-0 200-661-7	01-2119457558-25	603-117-00-0	
Class	ification: Flam. Liq.	2;H225, Eye Irrit. 2;H	1319, STOT SE 3;H336		

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 meas	sures
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	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. 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

General fire hazards

Extremely flammable aerosol.

5.1. Extinguishing media	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from the substance or mixture	Contents under pressure. Pressurised container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Special fire fighting procedures	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.
Specific methods	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

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. 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. 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.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	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.
6.3. Methods and material for containment and cleaning up	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.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.
SECTION 7: Handling and	storage

7.1. Precautions for safe handling	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.
7.2. Conditions for safe storage, including any incompatibilities	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 away from incompatible materials (see Section 10 of the SDS).
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

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

Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	МАК	1200 mg/m3	
		500 ppm	
	STEL	4800 mg/m3	
		2000 ppm	
Carbon dioxide (CAS I24-38-9)	Ceiling	18000 mg/m3	
		10000 ppm	
	MAK	9000 mg/m3	
		5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 37-63-0)	MAK	500 mg/m3	
		200 ppm	
	STEL	2000 mg/m3	
		800 ppm	
Belgium. Exposure Limit Values			
Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	2420 mg/m3	
		1000 ppm	
	TWA	1210 mg/m3	
		500 ppm	
	STEL	500 ppm 54784 mg/m3	
	STEL		
	STEL	54784 mg/m3	
		54784 mg/m3 30000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS		54784 mg/m3 30000 ppm 9131 mg/m3	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS	TWA	54784 mg/m3 30000 ppm 9131 mg/m3 5000 ppm	
Carbon dioxide (CAS 124-38-9) Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 57-63-0)	TWA	54784 mg/m3 30000 ppm 9131 mg/m3 5000 ppm 1000 mg/m3	

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

Components	Туре	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	1400 mg/m3
	TWA	600 mg/m3
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1225 mg/m3
	TWA	980 mg/m3
Croatia. Dangerous Substance Ex Components	cposure Limit Values in the W Type	orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09 Value
acetone; propan-2-one; propanone (CAS 67-64-1)	MAC	1210 mg/m3
		500 ppm
Carbon dioxide (CAS	MAC	9000 mg/m3

124-38-9)

Croatia. Dangerous Substance Ex Components	posure Limit Values in the Wo Type	orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0 Value
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 57-63-0)	MAC	999 mg/m3
,		400 ppm
	STEL	1250 mg/m3
		500 ppm
Cyprus. OELs. Control of factory a Components	atmosphere and dangerous ຣເ Type	ubstances in factories regulation, PI 311/73, as amended Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 57-63-0)	TWA	980 mg/m3
,		400 ppm
Czech Republic. OELs. Governme	ent Decree 361	
Components	Туре	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	Ceiling	1500 mg/m3
	TWA	800 mg/m3
Carbon dioxide (CAS I24-38-9)	Ceiling	45000 mg/m3
	TWA	9000 mg/m3
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 57-63-0)	Ceiling	1000 mg/m3
,	TWA	500 mg/m3
Denmark. Exposure Limit Values		
Components	Туре	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	TLV	600 mg/m3
		250 ppm
Carbon dioxide (CAS 24-38-9)	TLV	9000 mg/m3
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 37-63-0)	TLV	490 mg/m3
·		200 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	
		5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3	
		250 ppm	
	TWA	350 mg/m3	
		150 ppm	

Finland, Workplace Exposure Limits

Finland. Workplace Expo Components	Туре	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	1500 mg/m3
		630 ppm
	TWA	1200 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9100 mg/m3
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	620 mg/m3
		250 ppm
	TWA	500 mg/m3
		200 ppm
France		
Components	Туре	Value
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclio s,< 5% n-hexane	STEL	1500 mg/m3
	TWA	1000 mg/m3
France. Threshold Limit Components	Values (VLEP) for Occupational Exposu Type	ure to Chemicals in France, INRS ED 984 Value
acetone; propan-2-one; propanone (CAS 67-64-1)	VLE	2420 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		1000 ppm
Regulatory status:	Regulatory binding (VRC)	
	VME	1210 mg/m3
Regulatory status:	Regulatory binding (VRC)	500 ppm
Regulatory status:	Regulatory binding (VRC)	
Carbon dioxide (CAS 124-38-9)	VME	9000 mg/m3
Regulatory status:	Regulatory indicative (VRI)	5000 ppm
Regulatory status:	Regulatory indicative (VRI)	5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	VLE	980 mg/m3
Regulatory status:	Indicative limit (VL)	
5 ,	· · /	400 ppm
Regulatory status:	Indicative limit (VL)	
Germany. DFG MAK List in the Work Area (DFG)	(advisory OELs). Commission for the li	nvestigation of Health Hazards of Chemical Compounds
Components	Туре	Value

Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1200 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9100 mg/m3	
		5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	500 mg/m3	
		200 ppm	

Germany - TRGS 900 Components	Туре	Value
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclic s,< 5% n-hexane	TWA	700 mg/m3
Hydrocarbons, C7, n-alkanes,isoalkanes, cyclic	TWA	1500 mg/m3
Germany. TRGS 900, Limit Values in th Components	e Ambient Air at the Workplac Type	e Value
acetone; propan-2-one;	AGW	1200 mg/m3
propanone (CAS 67-64-1)		500 ppm
Carbon dioxide (CAS	AGW	9100 mg/m3
124-38-9)	AGW	5000 ppm
Propen 2 di Jeonropul		
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	AGW	500 mg/m3
		200 ppm
Greece. OELs (Decree No. 90/1999, as a Components	amended) Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	3560 mg/m3
	TWA	1780 mg/m3
Carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3
		5000 ppm
	TWA	9000 mg/m3
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS	STEL	1225 mg/m3
67-63-0)		500 ppm
	TWA	980 mg/m3
		400 ppm
		400 ppm
Hungary. OELs. Joint Decree on Chem Components	ical Safety of Workplaces Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS	STEL	2000 mg/m3
67-63-0)	TWA	500 mg/m3
Iceland. OELs. Regulation 154/1999 on Components	occupational exposure limits Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	600 mg/m3
. ,		250 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	490 mg/m3
		200 ppm

Ireland. Occupational Exposure Limits

Ireland. Occupational Exposure Li			
Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	STEL	27000 mg/m3	
		15000 ppm	
	TWA	9000 mg/m3	
		5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
Italy. Occupational Exposure Limi	ts		
Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	
		5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	400 ppm	
,	TWA	200 ppm	
Latvia. OELs. Occupational expos	ure limit values of chemical s	ubstances in work environment	
Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	
		5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3	
,	TWA	350 mg/m3	
Lithuania. OELs. Limit Values for	Chemical Substances, Gener	al Requirements	
Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	2420 mg/m3	
,		1000 ppm	

propanone (CAS 07-04-1)		
		1000 ppm
	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
		250 ppm
	TWA	350 mg/m3
		150 ppm

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A
TypeComponentsTypeValueacetone; propan-2-one;
propanone (CAS 67-64-1)TWA1210 mg/m3Carbon dioxide (CAS
124-38-9)TWA500 ppmS00 ppmTWA9000 mg/m3500 ppm5000 ppm

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

Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	
		5000 ppm	
Netherlands. OELs (binding)			
Netherlands. OELs (binding) Components	Туре	Value	
	Type STEL	Value 2420 mg/m3	
Components acetone; propan-2-one;			

Norway. Administrative Norms for Contaminants in the Workplace

Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TLV	295 mg/m3	
		125 ppm	
Carbon dioxide (CAS 124-38-9)	TLV	9000 mg/m3	
		5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TLV	245 mg/m3	
		100 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	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	1800 mg/m3	
	TWA	600 mg/m3	
Carbon dioxide (CAS 124-38-9)	STEL	27000 mg/m3	
	TWA	9000 mg/m3	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1200 mg/m3	
	TWA	900 mg/m3	
Portugal. OELs. Decree-Law n. 29	0/2001 (Journal of the Republ	ic - 1 Series A, n.266)	
Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	

5000 ppm

Portugal. VLEs. Norm on	occupational exposure to chemical a	agents (NP 1796)
Components	Type	Va

Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
Carbon dioxide (CAS 124-38-9)	STEL	30000 ppm	
	TWA	5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace Components Type Value

Components	туре	value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	
		5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	500 mg/m3	
		203 ppm	
	TWA	200 mg/m3	
		81 ppm	

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

Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	
		5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3	
		400 ppm	
	TWA	500 mg/m3	
		200 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	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	
		5000 ppm	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	500 mg/m3	
		200 ppm	
Spain. Occupational Exposure Limits			
Components	Туре	Value	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	

Spain. Occupational Exposure Limits		
Components	Туре	Value
Carbon dioxide (CAS 124-38-9)	TWA	9150 mg/m3
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
		400 ppm
	TWA	500 mg/m3
		200 ppm
Sweden		
Components	Туре	Value
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclic s,< 5% n-hexane	STEL (STV)	300 ppm
	TWA	200 ppm
Hydrocarbons, C7, n-alkanes,isoalkanes, cyclic	STEL (STV)	300 ppm
	TWA	200 ppm
Sweden. OELs. Work Environment A Components	uthority (AV), Occupational E Type	Exposure Limit Values (AFS 2015:7) Value
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	1200 mg/m3
		500 ppm
	TWA	600 mg/m3
		250 ppm
Carbon dioxide (CAS	STEL	18000 mg/m3
124-38-9)		10000 ppm
	TWA	9000 mg/m3
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS	STEL	600 mg/m3
67-63-0)		070
		250 ppm
	TWA	350 mg/m3
		150 ppm
Switzerland Components	Turne	Value
	Туре	
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclic s,< 5% n-hexane	TWA	500 ppm
Switzerland. SUVA Grenzwerte am An Components	rbeitsplatz Type	Value
acetone; propan-2-one;	STEL	2400 mg/m3
propanone (CAS 67-64-1)		1000 ppm
	TWA	1200 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS	STEL	1000 mg/m3
67-63-0)		400 ppm

Switzerland. SUVA Grenzwerte an Components	m Arbeitsplatz Type	Value
	TWA	500 mg/m3
		200 ppm
UK. EH40 Workplace Exposure L	imits (WELs)	
Components	Туре	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	3620 mg/m3
		1500 ppm
	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	STEL	27400 mg/m3
		15000 ppm
	TWA	9150 mg/m3
		5000 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1250 mg/m3
		500 ppm
	TWA	999 mg/m3
		400 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

Componente	i j po	Valao	
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	
		5000 ppm	

Biological limit values

Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended) Components Value Determinant Specimen Sampling Time

Components	value	Determinant	Specimen	Sampling Time
acetone; propan-2-one; propanone (CAS 67-64-1)	20 mg/g	Acetone	Creatinine in urine	*
	20 mg/l	Acetone	Blood	*
	0,34 mmol/l	Acetone	Blood	*
	39 mmol/mol	Acetone	Creatinine in urine	*
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	50 mg/l	Acetone	Blood	*
	50 mg/l	Acetone	Urine	*
	0,86 umol/l	Acetone	Urine	*
	0,86 umol/l	Acetone	Blood	*

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

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)					
Components	Value	Determinant	Specimen	Sampling Time	
acetone; propan-2-one; propanone (CAS 67-64-1)	100 mg/l	Acétone	Urine	*	
* - For sampling details, ple	ase see the source do	cument.			
Germany. TRGS 903, BA1	List (Biological Limi	t Values)			
Components	Value	Determinant	Specimen	Sampling Time	
acetone; propan-2-one; propanone (CAS 67-64-1)	80 mg/l	ACETON	Urine	*	

Components	Value	imit Values) Determinant	Specimen	Sampling	g Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	25 mg/l	ACETON	Urine	*	
/	25 mg/l	ACETON	Blood	*	
* - For sampling details, ple	ase see the source	document.			
Slovakia. BLVs (Biologica			concerning prot	ection of w	orkers exposed to chemic
agents, Annex 2			51		•••••
Components	Value	Determinant	Specimen	Sampling	g Time
acetone; propan-2-one; propanone (CAS 67-64-1)	53,36 mg/g	Acetone	Creatinine in urine	*	
	80 mg/l	Acetone	Urine	*	
* - For sampling details, ple	ase see the source	document.			
Spain. Biological Limit Va Components	llues (VLBs), Occu Value	pational Exposure Li Determinant	mits for Chemica Specimen	al Agents, T Sampling	
acetone; propan-2-one; propanone (CAS 67-64-1)	50 mg/l	Acetona	Urine	*	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	40 mg/l	Acetona	Urine	*	
* - For sampling details, ple	ase see the source	document			
Switzerland. BAT-Werte (e as per SUVΔ)		
Components	Value	Determinant	Specimen	Sampling	g Time
acetone; propan-2-one; propanone (CAS 67-64-1)	80 mg/l	ACETON	Urine	*	
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	25 mg/l	ACETON	Urine	*	
,	25 mg/l	ACETON	Blood	*	
* - For sampling details, ple	and and the source				
- I UI sampling uctails, pic	ase see the source	document.			
ommended monitoring		document. d monitoring procedure	es.		
ommended monitoring cedures	Follow standard		9S.		
ommended monitoring cedures ived no effect levels (DNE	Follow standard		25.		
ommended monitoring cedures ved no effect levels (DNE <u>General Population</u>	Follow standard			ent factor	Notes
ommended monitoring cedures ved no effect levels (DNE <u>General Population</u> Components	Follow standard	d monitoring procedure	Assessm		Notes
ommended monitoring cedures ved no effect levels (DNE <u>General Population</u> Components	Follow standard L s) kanes,isoalkanes,cy Dermal nhalation	d monitoring procedure	Assessm		Notes
ommended monitoring cedures ved no effect levels (DNE) <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, I Long-term, Systemic, O	Follow standard L s) kanes,isoalkanes,cy Dermal nhalation Dral	Value vclics,< 5% n-hexane (* 699 mg/kg bw/day 608 mg/m3 699 mg/kg bw/day	Assessm		Notes
ommended monitoring cedures ved no effect levels (DNE <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, I Propan-2-ol; Isopropyl alcol Long-term, Systemic, I	Follow standard L s) kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal	Value vclics,< 5% n-hexane (699 mg/kg bw/day 608 mg/m3 699 mg/kg bw/day AS 67-63-0) 319 mg/kg bw/day	Assessm CAS EC921-024-6 2		Repeated dose toxicity
ommended monitoring cedures ved no effect levels (DNE <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, C Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Long-term, Systemic, I	Follow standard L s) kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation	Value vclics,< 5% n-hexane (699 mg/kg bw/day 608 mg/m3 699 mg/kg bw/day AS 67-63-0) 319 mg/kg bw/day 89 mg/m3	<u>Assessm</u> CAS EC921-024-6 2 2		Repeated dose toxicity Repeated dose toxicity
ommended monitoring cedures ved no effect levels (DNE <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, I Cong-term, Systemic, C Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Long-term, Systemic, I Long-term, Systemic, I	Follow standard L s) kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation	Value vclics,< 5% n-hexane (699 mg/kg bw/day 608 mg/m3 699 mg/kg bw/day AS 67-63-0) 319 mg/kg bw/day	Assessm CAS EC921-024-6 2		Repeated dose toxicity
ommended monitoring cedures ved no effect levels (DNE <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, I Cong-term, Systemic, C Propan-2-ol; Isopropyl alco Long-term, Systemic, I Long-term, Systemic, I Long-term, Systemic, I Cong-term, Systemic, I	Follow standard L s) kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation	Value vclics,< 5% n-hexane (699 mg/kg bw/day 608 mg/m3 699 mg/kg bw/day AS 67-63-0) 319 mg/kg bw/day 89 mg/m3 26 mg/kg bw/day	Assessm CAS EC921-024-6 2 2 2	5)	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity
ommended monitoring cedures ved no effect levels (DNE <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, C Propan-2-ol; Isopropyl alcol Long-term, Systemic, C Long-term, Systemic, C Long-term, Systemic, C <u>Workers</u> <u>Components</u>	Follow standard L s) kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral	Value vclics,< 5% n-hexane (699 mg/kg bw/day 608 mg/m3 699 mg/kg bw/day AS 67-63-0) 319 mg/kg bw/day 89 mg/m3 26 mg/kg bw/day Value	Assessm CAS EC921-024-6 2 2 2 Assessm	6) ent factor	Repeated dose toxicity Repeated dose toxicity
ommended monitoring cedures ved no effect levels (DNE General Population Components Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, C Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Long-term, Systemic, I Long-term, Systemic, C Workers Components Hydrocarbons, C6-C7, n-all Long-term, Systemic, I	Follow standard kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral kanes,isoalkanes,cy Dermal	Value volta volta	Assessm CAS EC921-024-6 2 2 2 Assessm	6) ent factor	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity
ommended monitoring cedures ved no effect levels (DNE <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, C Propan-2-ol; Isopropyl alco Long-term, Systemic, C Dong-term, Systemic, C Long-term, Systemic, C <u>Workers</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, C	Follow standard kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral kanes,isoalkanes,cy Dermal nhalation	Value vclics,< 5% n-hexane (699 mg/kg bw/day 608 mg/m3 699 mg/kg bw/day AS 67-63-0) 319 mg/kg bw/day 89 mg/m3 26 mg/kg bw/day Value vclics,< 5% n-hexane (773 mg/kg bw/day 2035 mg/m3	Assessm CAS EC921-024-6 2 2 2 Assessm	6) ent factor	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity
ommended monitoring cedures ved no effect levels (DNEI <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, C Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Long-term, Systemic, I Long-term, Systemic, C <u>Workers</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Dong-term, Systemic, I Propan-2-ol; Isopropyl alcol	Follow standard Ls) kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral kanes,isoalkanes,cy Dermal nhalation hol; Isopropanol (CA	Value volics,< 5% n-hexane (699 mg/kg bw/day 608 mg/m3 699 mg/kg bw/day AS 67-63-0) 319 mg/kg bw/day 89 mg/m3 26 mg/kg bw/day Value volics,< 5% n-hexane (773 mg/kg bw/day 2035 mg/m3 AS 67-63-0)	Assessm CAS EC921-024-6 2 2 2 Assessm CAS EC921-024-6	6) ent factor	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity
ommended monitoring cedures ved no effect levels (DNE General Population Components Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, C Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Long-term, Systemic, I Uong-term, Systemic, C Workers Components Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, I Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Propan-2-ol; Isopropyl alcol	Follow standard kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral kanes,isoalkanes,cy Dermal nhalation hol; Isopropanol (CA Dermal nhalation	Value vclics,< 5% n-hexane (699 mg/kg bw/day 608 mg/m3 699 mg/kg bw/day AS 67-63-0) 319 mg/kg bw/day 89 mg/m3 26 mg/kg bw/day Value vclics,< 5% n-hexane (773 mg/kg bw/day 2035 mg/m3	Assessm CAS EC921-024-6 2 2 2 Assessm	6) ent factor	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity
ommended monitoring cedures ved no effect levels (DNEI <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, C Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Long-term, Systemic, C Workers <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Dropan-2-ol; Isopropyl alcol Long-term, Systemic, I Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Propan-2-ol; Isopropyl alcol Long-term, Systemic, I dicted no effect concentra	Follow standard kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral kanes,isoalkanes,cy Dermal nhalation hol; Isopropanol (CA Dermal nhalation	Value vclics, < 5% n-hexane (Assessmi CAS EC921-024-6 2 2 2 Assessmi CAS EC921-024-6 1 1	ent factor 6)	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity Notes
ommended monitoring cedures ved no effect levels (DNEI <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, C Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Long-term, Systemic, C <u>Workers</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Dicted no effect concentra <u>Components</u>	Follow standard kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral kanes,isoalkanes,cy Dermal nhalation hol; Isopropanol (CA Dermal nhalation tions (PNECs)	Value vclics, < 5% n-hexane (Assessmi CAS EC921-024-6 2 2 2 Assessmi CAS EC921-024-6 1 1	6) ent factor	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity
ommended monitoring cedures ved no effect levels (DNEI <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, O Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Long-term, Systemic, I Long-term, Systemic, O <u>Workers</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, I Dog-term, Systemic, I Cong-term, Systemic, I Dropan-2-ol; Isopropyl alcol Long-term, Systemic, I Dropan-2-ol; Isopropyl alcol	Follow standard kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral kanes,isoalkanes,cy Dermal nhalation hol; Isopropanol (CA Dermal nhalation tions (PNECs)	Walue rclics, < 5% n-hexane (Assessm CAS EC921-024-6 2 2 2 Assessm CAS EC921-024-6 1 1 3	ent factor 6)	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity Notes
ommended monitoring cedures ived no effect levels (DNEI <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, C Propan-2-ol; Isopropyl alcol Long-term, Systemic, C Uorg-term, Systemic, C <u>Workers</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, C Uorg-term, Systemic, C Uorg-term, Systemic, C Long-term, Systemic, C Long-term, Systemic, C Uorg-term, Systemic, C Components Hydrocarbons, C6-C7, n-all Cong-term, Systemic, C Cong-term, Systemic, C C Cong-term, Systemic, C C C C C C C C C C C C C C C C C C C	Follow standard kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral kanes,isoalkanes,cy Dermal nhalation hol; Isopropanol (CA Dermal nhalation tions (PNECs)	d monitoring procedure Value rclics, < 5% n-hexane (Assessm CAS EC921-024-6 2 2 2 Assessm CAS EC921-024-6 1 1 1	ent factor 6)	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity Notes
ommended monitoring cedures ived no effect levels (DNEI <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, O Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Long-term, Systemic, I Long-term, Systemic, O <u>Workers</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, I Dog-term, Systemic, I Cong-term, Systemic, I Dog-term, Systemic, I Cong-term, Systemic, I Dropan-2-ol; Isopropyl alcol Long-term, Systemic, I Dropan-2-ol; Isopropyl alcol	Follow standard kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral kanes,isoalkanes,cy Dermal nhalation hol; Isopropanol (CA Dermal nhalation tions (PNECs)	Walue rclics, < 5% n-hexane (Assessm CAS EC921-024-6 2 2 2 Assessm CAS EC921-024-6 1 1 3	ent factor 6)	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity Notes
ommended monitoring cedures ived no effect levels (DNEI <u>General Population</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, O Propan-2-ol; Isopropyl alcol Long-term, Systemic, I Long-term, Systemic, I Long-term, Systemic, O <u>Workers</u> <u>Components</u> Hydrocarbons, C6-C7, n-all Long-term, Systemic, I Long-term, Systemic, I Dog-term, Systemic, I Cong-term, Systemic, I Dog-term, Systemic, I Dropan-2-ol; Isopropyl alcol Long-term, Systemic, I Dropan-2-ol; Isopropyl alcol Freshwater Marine water	Follow standard kanes,isoalkanes,cy Dermal nhalation Dral hol; Isopropanol (CA Dermal nhalation Dral kanes,isoalkanes,cy Dermal nhalation hol; Isopropanol (CA Dermal nhalation tions (PNECs)	d monitoring procedure Value rclics, < 5% n-hexane (Assessm CAS EC921-024-6 2 2 2 Assessm CAS EC921-024-6 1 1 1 1	ent factor 6)	Repeated dose toxicity Repeated dose toxicity Repeated dose toxicity Notes

Soil	28 mg/kg
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	s, 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	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. For prolonged or repeated skin contact use suitable protective gloves. Full contact: Glove material: Neoprene. Use gloves with breakthrough time of 480 minutes. Minimum glove thickness 0.38 mm.
- Other	Wear appropriate chemical resistant clothing.
Respiratory protection	Chemical respirator with organic vapour cartridge and full facepiece. (Filter type AX)
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

Appearance	
Physical state	Liquid.
Form	Aerosol
Colour	Not available.
Odour	Not available.
Odour threshold	Not available.
рН	Not applicable.
Melting point/freezing point	-94,7 °C (-138,5 °F) estimated
Initial boiling point and boiling range	56 - 99 °C (132,8 - 210,2 °F)
Flash point	-26,0 °C (-14,8 °F)
Evaporation rate	2,8 (Ether=1)
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	2,5 % estimated
Flammability limit - upper (%)	12,8 % estimated
Vapour pressure	Not available.
Vapour density	3
Vapour density temp.	20 °C (68 °F)
Relative density	0,71 g/cm3
Relative density temperature	20 °C (68 °F)
Solubility(ies)	
Solubility (water)	Insoluble in water
Partition coefficient (n-octanol/water)	Not available.

Auto-ignition temperature	> 200 °C (> 392 °F)	
Decomposition temperature	Not available.	
Viscosity	Not available.	
Explosive properties	Not explosive.	
Oxidising properties	Not oxidising.	
9.2. Other information		
Aerosol spray enclosed spa	ice	
Deflagration density	Not available.	
Aerosol spray ignition distance	Not available.	
Chemical family	Cleaner	
VOC	685 g/l	
SECTION 10: Stability and reactivity		
10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.	
10.2. Chemical stability	Material is stable under normal conditions.	
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.	

10.4. Conditions to avoid	Avoid high temperatures. Avoid temperatures exceeding the decomposition temperature.
10.5. Incompatible materials	Acids. Strong oxidising agents. Aluminium. Chlorine. Isocyanates.
10.6. Hazardous decomposition products	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		
Inhalation	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.	
Skin contact	Causes skin irritation.	
Eye contact	Causes serious eye irritation.	
Ingestion	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. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.	

11.1. Information on toxicological effects

Components	Species	Test Results
acetone; propan-2-one; propan	one (CAS 67-64-1)	
Acute		
Dermal		
LD50	Rat	15800 mg/kg
Hydrocarbons, C6-C7, n-alkane	es,isoalkanes,cyclics,< 5% n-hexane	
Acute		
Dermal		
Liquid		
LD50	-	2920 mg/kg bw/day, 24 h
Inhalation		
Vapour	_	
LC50	Rat	30000 mg/m³, 4 h
Oral		
Liquid		
LD50	Rat	5840 mg/kg bw/day
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	

Respiratory sensitisation	Based on available data, the classification criteria are not met.	
Skin sensitisation	Based on available data, the classification criteria are not met.	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.	
Carcinogenicity	Based on available data, the classification criteria are not met.	
Hungary. 26/2000 EüM Ordir (as amended) Not listed.	nance on protection against and preventing risk relating to exposure to carcinogens at work	
Reproductive toxicity	Based on available data, the classification criteria are not met.	
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.	
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.	
Aspiration hazard	Based on available data, the classification criteria are not met.	
Mixture versus substance information	Not available.	
Other information	Not available.	
SECTION 12: Ecological in	formation	
12.1. Toxicity	Toxic to aquatic life with long lasting effects.	
12.2. Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.	
12.3. Bioaccumulative potential		
Partition coefficient n-octanol/water (log Kow)		
acetone; propan-2-one; propa Propan-2-ol; Isopropyl alcohol		
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. Other adverse effects	The product contains volatile organic compounds which have a photochemical ozone creation potential.	
12.7. Additional information		
Estonia Dangerous substan	ces in soil Data	
Propan-2-ol; Isopropyl alc (CAS 67-63-0)	ohol; Isopropanol 0,5 mg/kg Chemical pesticides (As the total sum of the active substances) 0,5 mg/kg Chemical pesticides (As the total sum of the active substances) 20 mg/kg Chemical pesticides (As the total sum of the active substances) 5	

mg/kg

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
Residual waste	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).
Contaminated packaging	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.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	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.
Special precautions	Dispose in accordance with all applicable regulations.
SECTION 14: Transport information	

Chemical pesticides (As the total sum of the active substances) 5

ADR

14.1. UN number

14.2. UN proper shipping AEROSOLS, flammable name 14.3. Transport hazard class(es) 2.1 Class Subsidiary risk Not available. Hazard No. (ADR) Tunnel restriction code (D) ADR/RID - Classification 5F code: 14.4. Packing group Not applicable 14.5. Environmental hazards No. 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user ΙΑΤΑ 14.1. UN number UN1950 14.2. UN proper shipping AEROSOLS name 14.3. Transport hazard class(es) Class 2.1 Subsidiary risk Not applicable 14.4. Packing group 14.5. Environmental hazards No. 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user IMDG UN1950 14.1. UN number 14.2. UN proper shipping **AEROSOLS** name 14.3. Transport hazard class(es) Class 2.1 Subsidiary risk 14.4. Packing group Not available. 14.5. Environmental hazards Marine pollutant No. EmS F-D, S-U Read safety instructions, SDS and emergency procedures before handling. 14.6. Special precautions for user Not established. 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code 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

acetone; propan-2-one; propanone (CAS 67-64-1) Carbon dioxide (CAS 124-38-9)

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 acetone; propan-2-one; propanone (CAS 67-64-1)
 - Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)

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

acetone; propan-2-one; propanone (CAS 67-64-1)

Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)

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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	This safety data sheet conforms to the following laws, regulations and standards: This safety data sheet conforms to the following laws, regulations and standards: Act on the management of packaging and packaging waste of June 13, 2013 Regulation of the Minister of Health of June 11, 2012 on the categories of dangerous substances and dangerous preparations whose packaging should be fitted with child-resistant closures and a tactile warning of danger REGULATION OF THE MINISTER OF HEALTH of February 2, 2011 on tests and measurements of factors harmful to health in working environments Regulation of Ministry of Labor and Social Policy of June 6, 2014. On the matter of maximum permissible concentrations and intensities of harmful factors in the work environment (Journal of Laws 2014, item. 817) Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices Decree No. 25/2000. (IX. 30.) EüM-SzCSM of the Minister of Health and the Minister of Social and Family Affairs on chemical safety at work Act No. 93 of 1993 on Labour Safety (1993.évi XCIII.), as amended Government Decree No. 220 of 2004 (VII. 21.) providing rules on the protection of surface waters quality Government Decree No. 98/2001 (VI. 15.), on the conditions of the activities related to hazardous waste, and Ministry of Environmental Affairs Decree No. 16/2001 (VII. 18.), on the register of waste s Public Act No. XXV of 2000 on Chemical Safety, and Application Decree No. 44/2000. (XII.27.) EüM [of the Ministry of Health] 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: Intermediate Bulk Container. IMDG: International Maritime Dangerous Goods. MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG). MARPOL: International Convention for the Prevention of Pollution from Ships. PBT: Persistent, bioaccumulative, 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. VME: Exposure Limit Value. VME: Exposure Average Value. VOC: Volatile organic compounds. vPvB: Very persistent and very bioaccumulative. STEL: Short-term Exposure Limit.
References	Not available.
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15	H225 Highly flammable liquid and vapour. H280 Contains gas under pressure; may explode if heated. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.
Revision information	Product and Company Identification: Alternate Trade Names Composition / Information on Ingredients: Ingredients
Training information	Follow training instructions when handling this material.
Disclaimer	CRC Industries Europe byba cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.