EU safety data sheet

Trade name: KRONES celerol DG 7800

Current version : 1.0.4, issued: 25.11.2022 **Replaced version:** 1.0.3, issued: 08.04.2022 **Region:** GB

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

1.1 Product identifier

Trade name

KRONES celerol DG 7800

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

Relevant identified uses of the substance or mixture
Cleaner

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
KIC KRONES Internationale Cooperationsgesellschaft mbH
Böhmerwaldstraße 5
93073 Neutraubling

Telephone no. +49 9401 70-3020
e-mail kic@kic-krones.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)
In case of transport incidents and other emergencies:
+44 (0) 1235 239 670 (NCEC, National Chemical Emergency Centre)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aerosol 1; H222
Asp. Tox. 1; H304

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms

GHS02

Signal word
Danger

Hazardous component(s) to be indicated on label:
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hazard statement(s)

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

Hazard statements (EU)

EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statement(s)

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.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C/122°F.

Labelling information

The labelling of an aspiration hazard (Asp. Tox. 1; H304) is not mandatory for aerosols and containers with a sealed spray attachment (Regulation (EC) 1272/2008, Annex 1, 1.3.3).

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**ethanol**			
	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 25.00 - < 50.00	wt%
2	**butane**			
	106-97-8 203-448-7 601-004-00-0 01-2119474691-32	Flam. Gas 1A; H220 Press. Gas liq.; H280	>= 10.00 - < 25.00	wt%
3	**propane**			
	74-98-6 200-827-9 601-003-00-5 01-2119486944-21	Flam. Gas 1A; H220 Press. Gas compr.; H280	>= 10.00 - < 25.00	wt%
4	**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**			
	- 927-241-2 - 01-2119471843-32	Aquatic Chronic 3; H412 Asp. Tox. 1; H304 Flam. Liq. 3; H226 STOT SE 3; H336 EUH066	>= 10.00 - < 25.00	wt%
5	**isobutane**			
	75-28-5 200-857-2 601-004-00-0 01-2119485395-27	Flam. Gas 1A; H220 Press. Gas compr.; H280	>= 10.00 - < 25.00	wt%
6	**propan-2-ol**			
	67-63-0 200-661-7 603-117-00-0 01-2119457558-25	Eye Irrit. 2; H319 Flam. Liq. 2; H225 STOT SE 3; H336	< 5.00	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)

1	-	Eye Irrit. 2; H319: C >= 50%	-	-
2	C, U	-	-	-
5	U, C	-	-	-

Full text for the notes: pls. see section 16 “Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)”.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician.

After inhalation
Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air. In case of persisting adverse effects consult a physician.

After skin contact
In case of contact with skin wash off with water. Consult a doctor if skin irritation persists.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get medical attention if pain still persists.

After ingestion
Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
Frostbite; Dizziness

Effects
In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Carbon dioxide; Water spray jet; Extinguishing powder; Fight large fires with directed water spray or Alcohol-resistant foam

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide and carbon dioxide; Bursting aerosol cans can be launched out of a fire with great force.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion byproducts. Cool closed containers exposed to fire with water. Use self-contained breathing apparatus. Wear protective clothing. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Closed containers may rupture when exposed to extreme heat.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Keep away from ignition sources.

For emergency responders
Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions
Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Collect mechanically.

6.4 Reference to other sections
Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances. Do not pierce or burn, even after use.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

Advice on protection against fire and explosion
Keep away from sources of ignition - refrain from smoking. Isolate from sources of heat, sparks and open flame.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight. Storage temperature may not exceed 50°C (=122°F).

Recommended storage temperature

Value	max.	50	°C

Requirements for storage rooms and vessels
Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products
Substances to be avoided, see section 10.

7.3 Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.		EC no.	
1	**ethanol**	**64-17-5**		**200-578-6**	
	List of approved workplace exposure limits (WELs) / EH40				
	Ethanol				
	WEL long-term (8-hr TWA reference period)	1920	mg/m³	1000	ppm
2	**butane**	**106-97-8**		**203-448-7**	
	List of approved workplace exposure limits (WELs) / EH40				
	Butane				
	WEL short-term (15 min reference period)	1810	mg/m³	750	ppm
	WEL long-term (8-hr TWA reference period)	1450	mg/m³	600	ppm
	Comments	Carc, (only applies if Butane contains more than 0.1% of buta-1,3-diene)			
3	**propan-2-ol**	**67-63-0**		**200-661-7**	
	List of approved workplace exposure limits (WELs) / EH40				

	Propan-2-ol				
	WEL short-term (15 min reference period)	1250	mg/m³	500	ppm
	WEL long-term (8-hr TWA reference period)	999	mg/m³	400	ppm

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**ethanol**			**64-17-5 200-578-6**	
	dermal	Long term (chronic)	systemic	343	mg/kg/day
	inhalative	Long term (chronic)	systemic	950	mg/m³
2	**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**			**- 927-241-2**	
	dermal	Long term (chronic)	systemic	208	mg/kg/day
	inhalative	Long term (chronic)	systemic	871	mg/m³
3	**propan-2-ol**			**67-63-0 200-661-7**	
	dermal	Long term (chronic)	systemic	888	mg/kg/day
	inhalative	Long term (chronic)	systemic	500	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**ethanol**			**64-17-5 200-578-6**	
	oral	Long term (chronic)	systemic	87	mg/kg/day
	dermal	Long term (chronic)	systemic	206	mg/kg/day
	inhalative	Long term (chronic)	systemic	114	mg/m³
2	**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**			**- 927-241-2**	
	oral	Long term (chronic)	systemic	125	mg/kg/day
	dermal	Long term (chronic)	systemic	125	mg/kg/day
	inhalative	Long term (chronic)	systemic	185	mg/m³
3	**propan-2-ol**			**67-63-0 200-661-7**	
	oral	Long term (chronic)	systemic	26	mg/kg/day
	dermal	Long term (chronic)	systemic	319	mg/kg/day
	inhalative	Long term (chronic)	systemic	89	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	**Type**	**Value**	
1	**ethanol**		**64-17-5 200-578-6**	
	water	fresh water	0.96	mg/L
	water	Aqua intermittent	2.75	mg/L
	water	marine water	0.79	mg/L
	water	fresh water sediment	3.6	mg/kg dry weight
	water	marine water sediment	2.9	mg/L
	soil	-	0.63	mg/kg dry weight
	sewage treatment plant	-	580	mg/L
	secondary poisoning	-	0.38	mg/kg food
2	**propan-2-ol**		**67-63-0 200-661-7**	
	water	fresh water	140.9	mg/L
	water	Aqua intermittent	140.9	mg/L
	water	marine water	140.9	mg/L
	water	fresh water sediment	552	mg/L

	water	marine water sediment	552	mg/L
	soil	-	28	mg/kg
	sewage treatment plant	-	2251	mg/L
	secondary poisoning	-	160	mg/kg
	with reference to: food			

8.2 Exposure controls

Appropriate engineering controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.
Respirator AX/P2

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	NBR		
Material thickness	>=	0.38	mm
Breakthrough time	>=	480	min

Other
Chemical-resistant work clothes.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form
gas type; Aerosol

Colour
colourless

Odour
characteristic

pH value
No data available

Boiling point / boiling range	
Value	78 °C

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point

Value	<	-60	°C
Method	DIN 51755		

Ignition temperature			
Value	min.	200	°C
Method	DIN 51794		

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure
No data available

Relative vapour density
No data available

Relative density
No data available

Density			
Value		0.82	g/cm³
Reference temperature		15	°C
Method	DIN 51757		

Solubility in water	
Comments	partly soluble

Solubility
No data available

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
log Pow			-0.35	
Reference temperature			24	°C
with reference to	pH 7,4			
Method	OECD 107			
Source	ECHA			
2	**propane**	**74-98-6**		**200-827-9**
log Pow	appr.		1.8	
Method	QSAR			
Source	ECHA			
3	**isobutane**	**75-28-5**		**200-857-2**
log Pow			2.80	
Reference temperature			20	°C
with reference to	pH 7			
Source	ECHA			
4	**propan-2-ol**	**67-63-0**		**200-661-7**
log Pow			0.05	
Reference temperature			25	°C
Source	ECHA			

Kinematic viscosity
No data available

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Dangerous reactions are not expected if the product is handled according to its intended use.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid
Heat, naked flames and other ignition sources.

10.5 Incompatible materials
strong oxidizing agents; strong acids; strong bases

10.6 Hazardous decomposition products
None, if handled according to intended use.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
LD50		10470		mg/kg bodyweight
Species	rat			
with reference to	95% ethanol in water			
Method	OECD 401			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
2	**propan-2-ol**	**67-63-0**		**200-661-7**
LD50		5840		mg/kg bodyweight
Species	rat			
Method	OECD 401			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			

Acute dermal toxicity
No data available

Acute inhalational toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
LC50		124.7		mg/l
Duration of exposure		4		h
State of aggregation	Vapour			
Species	rat			
Method	OECD 403			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
2	**propane**	**74-98-6**		**200-827-9**
LC50	>	800000		ppmV
Duration of exposure		0.25		h
State of aggregation	Gas			
Species	rat			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
3	**isobutane**	**75-28-5**		**200-857-2**
LC50		520400		ppmV
Duration of exposure		2		h
State of aggregation	Gas			

Species	mouse
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

4	**propan-2-ol**	**67-63-0**	**200-661-7**
LC50	>	10000	ppmV
Duration of exposure		6	h
State of aggregation	Vapour		
Species	rat		
Method	OECD 403		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	**propan-2-ol**	**67-63-0**	**200-661-7**
Species	rabbit		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	irritant		
Evaluation/classification	Based on available data, the classification criteria are met.		
2	**propan-2-ol**	**67-63-0**	**200-661-7**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	irritant		
Evaluation/classification	Based on available data, the classification criteria are met.		

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Route of exposure	respiratory tract		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	Skin		
Species	mouse		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	**propan-2-ol**	**67-63-0**	**200-661-7**
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**

1	ethanol	64-17-5	200-578-6
Type of examination		in vitro gene mutation study in bacteria	
Species		Salmonella typhimurium	
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Type of examination		in vitro gene mutation study in mammalian cells	
Species		mouse lymphoma cells	
Method		OECD 476	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Type of examination		Genotoxicity in vivo	
Species		mouse	
Method		OECD 478	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	**butane**	**106-97-8**	**203-448-7**
Type of examination		In vitro Mammalian Chromosomal Aberration Test	
Species		Human Lymphocyte	
Method		OECD 473	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Type of examination		in vitro gene mutation study in bacteria	
Species		Salmonella typhimurium	
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
3	**propane**	**74-98-6**	**200-827-9**
Route of exposure		inhalational	
Species		Salmonella typhimurium	
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
4	**isobutane**	**75-28-5**	**200-857-2**
Species		Salmonella typhimurium	
Method		Value taken from the literature	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
5	**propan-2-ol**	**67-63-0**	**200-661-7**
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Route of exposure		oral	
NOAEL			
Type of examination		2 generation study	
Species		mouse	
Method		OECD 416	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Route of exposure		inhalational	
NOAEL		>= 20000 ppm	
Type of examination		Prenatal Developmental Toxicity Study	
Species		rat	
Method		OECD 414	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	**butane**	**106-97-8**	**203-448-7**
Route of exposure		inhalational	
Species		rat	
Method		OECD 422	

Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

3	propane	74-98-6	200-827-9
Route of exposure	inhalational		
Species	rat		
Method	OECD 422		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

4	isobutane	75-28-5	200-857-2
Route of exposure	inhalational		
Species	rat		
Method	OECD 422		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

STOT - single exposure
No data available

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Route of exposure	oral		
Duration of exposure	14	week/s	
Species	rat		
Target organ	kidneys		
Method	OECD 408		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

2	butane	106-97-8	203-448-7
Route of exposure	inhalational		
Species	rat		
Method	OECD 422		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

3	propane	74-98-6	200-827-9
Route of exposure	inhalational		
Species	rat		
Method	OECD 422		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

4	isobutane	75-28-5	200-857-2
Route of exposure	inhalational		
Species	rat		
Method	OECD 422		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

5	propan-2-ol	67-63-0	200-661-7
Route of exposure	inhalational		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Aspiration hazard
No data available

11.2 Information on other hazards

Endocrine disrupting properties
No data available.

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**ethanol**	**64-17-5**		**200-578-6**	
LC50			14200		mg/l
Duration of exposure			96		h
Species		Pimephales promelas			
Method		EPA			
Source		ECHA			
2	**propan-2-ol**	**67-63-0**		**200-661-7**	
LC50			9640		mg/l
Duration of exposure			96		h
Species		Pimephales promelas			
Method		OECD 203			
Source		ECHA			

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**ethanol**	**64-17-5**		**200-578-6**	
EC50			5012		mg/l
Duration of exposure			48		h
Species		Ceriodaphnia dubia			
Method		ASTM Standard E 729-80			
Source		ECHA			
2	**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**-**		**927-241-2**	
EL50		> 22	- 46		mg/l
Duration of exposure			48		h
Species		Daphnia magna			
Method		OECD 202			
Source		ECHA			
3	**propan-2-ol**	**67-63-0**		**200-661-7**	
EC50		>	10000		mg/l
Duration of exposure			24		h
Species		Daphnia magna			
Method		OECD 202			
Source		ECHA			

Toxicity to Daphnia (chronic)					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**ethanol**	**64-17-5**		**200-578-6**	
NOEC			9.6		mg/l
Duration of exposure			9		day(s)
Species		Daphnia magna			
Source		ECHA			

Toxicity to algae (acute)					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**ethanol**	**64-17-5**		**200-578-6**	
EC50			275		mg/l
Duration of exposure			72		h
Species		Chlorella vulgaris			
Method		OECD 201			
Source		ECHA			

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**ethanol**	**64-17-5**		**200-578-6**	
Type		aerobic biodegradation			
Value		appr.	84		%
Duration			20		day(s)
Source		ECHA			
Evaluation		readily biodegradable			
2	**butane**	**106-97-8**		**203-448-7**	
Type		aerobic biodegradation			
Value			50		%
Duration			3.46		d
Method		QSAR			
Source		ECHA			
3	**propane**	**74-98-6**		**200-827-9**	
Type		aerobic biodegradation			
Value			50		%
Duration			3		d
Method		QSAR			
Source		ECHA			
Evaluation		readily biodegradable			
4	**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**-**		**927-241-2**	
Type		aerobic biodegradation			
Value			89		%
Duration			28		day(s)
Method		OECD 301 F			
Source		ECHA			
Evaluation		readily biodegradable			
5	**isobutane**	**75-28-5**		**200-857-2**	
Type		aerobic biodegradation			
Value			50		%
Duration			3.1		d
Method		QSAR			
Source		ECHA			
Evaluation		readily biodegradable			
6	**propan-2-ol**	**67-63-0**		**200-661-7**	
Type		BOD/COD			
Value			53		%
Duration			5		day(s)
Source		ECHA			
Evaluation		readily biodegradable			

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**ethanol**	**64-17-5**		**200-578-6**	
log Pow			-0.35		
Reference temperature			24		°C
with reference to		pH 7,4			
Method		OECD 107			
Source		ECHA			
2	**propane**	**74-98-6**		**200-827-9**	
log Pow		appr.	1.8		
Method		QSAR			

Source	ECHA		
3 isobutane	**75-28-5**		**200-857-2**
log Pow		2.80	
Reference temperature		20	°C
with reference to	pH 7		
Source	ECHA		
4 propan-2-ol	**67-63-0**		**200-661-7**
log Pow		0.05	
Reference temperature		25	°C
Source	ECHA		

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
No data available.

12.6 Endocrine disrupting properties
No data available.

12.7 Other adverse effects
No data available.

12.8 Other information

Other information
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	2
Classification code	5F
UN number	UN1950
Proper shipping name	AEROSOLS
Tunnel restriction code	D
Label	2.1

14.2 Transport IMDG

Class	2
UN number	UN1950
Proper shipping name	AEROSOLS
EmS	F-D, S-U
Label	2.1

14.3 Transport ICAO-TI / IATA

Class	2.1
UN number	UN1950
Proper shipping name	Aerosols, flammable
Label	2.1

14.4 Other information

No data available.

14.5 Environmental hazards
Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user
No data available.

14.7 Maritime transport in bulk according to IMO instruments
Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES				
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				No 3
The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				
No	**Substance name**	**CAS no.**	**EC no.**	**No**
1	**propan-2-ol**	**67-63-0**	**200-661-7**	**75**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	P3a

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

C	Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
U	When put on the market gases have to be classified as ‘Gases under pressure’, in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

Creation of the safety data sheet

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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

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