

# Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



## Ethanol 70 %, denatured

article number: **T913**  
Version: **5.0 en**  
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Version: (4)

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

### 1.1 Product identifier

Identification of the substance	<b>Ethanol</b>
Article number	T913
Registration number (REACH)	not relevant (mixture)

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

<b>Identified uses:</b>	laboratory chemical laboratory and analytical use
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### 1.3 Details of the supplier of the safety data sheet

125 London Wall,  
London,  
EC2Y 5AS

**Telephone:** +44 203 475 7012  
**e-mail:** info@safemedicalbasics.com  
**Website:** www.safemedicalbasics.com

Competent person responsible for the safety data sheet : Department Health, Safety and Environment

**e-mail (competent person)** : info@safemedicalbasics.com

### 1.4 Emergency telephone number

Emergency information service : +44 203 475 7012

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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

Classification acc. to GHS			
Section	Hazard class	Hazard class and category	Hazard statement
2.6	flammable liquid	(Flam. Liq. 2)	H225
3.3	serious eye damage/eye irritation	(Eye Irrit. 2)	H319

### 2.2 Label elements

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

**Signal word** : **Danger**

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### Pictograms

GHS02, GHS07



### Hazard statements

H225 Highly flammable liquid and vapour  
H319 Causes serious eye irritation

### Precautionary statements

#### **Precautionary statements - prevention**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.

#### **Precautionary statements - response**

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### **Labelling of packages where the contents do not exceed 125 ml**

Signal word: **Danger**

Symbol(s)



### 2.3 Other hazards

There is no additional information.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### **Description of the mixture**

Composition/information on ingredients.




Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Pictograms
Ethanol	CAS No 64-17-5  EC No 200-578-6  Index No 603-002-00-5  REACH Reg. No 01-2119457610-43-XXXX	70	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319	

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Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Pictograms
2-Butanone	CAS No 78-93-3  EC No 201-159-0  Index No 606-002-00-3  REACH Reg. No 01-2119457290-43- xxxx	1 - < 2	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336 EUH066	
2-Propanol	CAS No 67-63-0  EC No 200-661-7  Index No 603-117-00-0  REACH Reg. No 01-2119457558-25- xxxx	1 - < 2	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336	
Bitrex	CAS No 3734-33-6	< 0.1	Acute Tox. 4 / H302	

### Remarks

For full text of H-phrases: see SECTION 16. For full text of abbreviations: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures



#### General notes

Take off contaminated clothing.

#### Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

#### Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

### 4.2 Most important symptoms and effects, both acute and delayed

Irritation, Vertigo, Nausea, Abdominal pain, Vomiting, Breathing difficulties, Narcosis

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### 4.3 Indication of any immediate medical attention and special treatment needed

none

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media



#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings  
water spray, foam, alcohol resistant foam, dry extinguishing powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

### 5.2 Special hazards arising from the substance or mixture

Combustible. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

#### Hazardous combustion products

May produce toxic fumes of carbon monoxide if burning.

### 5.3 Advice for firefighters

Vapours are heavier than air. Beware of reignition. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures



#### For non-emergency personnel

Avoid contact with skin and eyes. Do not breathe vapour/spray. Removal of ignition sources.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Explosive properties.

### 6.3 Methods and material for containment and cleaning up

#### Advices on how to contain a spill

Covering of drains.

#### Advices on how to clean up a spill

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Provision of sufficient ventilation.

- Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight.

#### Incompatible substances or mixtures

Observe hints for combined storage.

#### Consideration of other advice

Ground/bond container and receiving equipment.

- Ventilation requirements

Use local and general ventilation.

- Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C.

#### 7.3 Specific end use(s)

No information available.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### National limit values

##### Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Notation	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Source
EU	ethyl methyl ketone	78-93-3		IOELV	200	600	300	900	2000/39/EC
GB	ethanol	64-17-5		WEL	1,000	1,920			EH40/2005
GB	propan-2-ol	67-63-0		WEL	400	999	500	1,250	EH40/2005
GB	butan-2-one (methyl ethyl ketone)	78-93-3		WEL	200	600	300	899	EH40/2005

##### Notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

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### Biological limit values

Country	Name of agent	Parameter	Notation	Identifier	Value	Material	Source
GB	butan-2-one	ethyl methyl ketone		BMGV	70 µmol/l	urine	EH40/2005

### Relevant DNELs/DMELs/PNECs and other threshold levels

#### • relevant DNELs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Ethanol	64-17-5	DNEL	1,900 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - systemic effects
Ethanol	64-17-5	DNEL	343 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
Ethanol	64-17-5	DNEL	950 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
2-Butanone	78-93-3	DNEL	600 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
2-Butanone	78-93-3	DNEL	1,161 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
2-Propanol	67-63-0	DNEL	500 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
2-Propanol	67-63-0	DNEL	888 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

#### • relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment	Exposure time
Ethanol	64-17-5	PNEC	0.79 mg/cm <sup>3</sup>	marine water	intermittent release
Ethanol	64-17-5	PNEC	2.75 mg/cm <sup>3</sup>	air	intermittent release
Ethanol	64-17-5	PNEC	3.6 mg/cm <sup>3</sup>	freshwater sediment	intermittent release
Ethanol	64-17-5	PNEC	580 mg/cm <sup>3</sup>	sewage treatment plant (STP)	intermittent release
Ethanol	64-17-5	PNEC	0.63 mg/cm <sup>3</sup>	soil	intermittent release
Ethanol	64-17-5	PNEC	0.96 mg/cm <sup>3</sup>	freshwater	intermittent release
2-Butanone	78-93-3	PNEC	55.8 mg/l	freshwater	short-term (single instance)
2-Butanone	78-93-3	PNEC	55.8 mg/l	marine water	short-term (single instance)
2-Butanone	78-93-3	PNEC	709 mg/l	sewage treatment plant (STP)	short-term (single instance)
2-Butanone	78-93-3	PNEC	284.7 mg/kg	freshwater sediment	short-term (single instance)
2-Butanone	78-93-3	PNEC	284.7 mg/kg	marine sediment	short-term (single instance)

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Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment	Exposure time
2-Butanone	78-93-3	PNEC	22.5 mg/kg	soil	short-term (single instance)
2-Propanol	67-63-0	PNEC	160 mg/kg	water	short-term (single instance)
2-Propanol	67-63-0	PNEC	140.9 mg/l	water	intermittent release
2-Propanol	67-63-0	PNEC	140.9 mg/l	freshwater	short-term (single instance)
2-Propanol	67-63-0	PNEC	140.9 mg/l	marine water	short-term (single instance)
2-Propanol	67-63-0	PNEC	2,251 mg/l	sewage treatment plant (STP)	short-term (single instance)
2-Propanol	67-63-0	PNEC	552 mg/kg	freshwater sediment	short-term (single instance)
2-Propanol	67-63-0	PNEC	552 mg/kg	marine sediment	short-term (single instance)
2-Propanol	67-63-0	PNEC	28 mg/kg	soil	short-term (single instance)

## 8.2 Exposure controls

### Individual protection measures (personal protective equipment)

#### Eye/face protection



Use safety goggle with side protection.

#### Skin protection



##### • hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

##### • type of material

Butyl caoutchouc (butyl rubber)

##### • material thickness

0,5 mm.

##### • breakthrough times of the glove material

>480 minutes (permeation: level 6)

##### • other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Flame-retardant protective clothing.

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### Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

### Environmental exposure controls

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	liquid (fluid)
Colour	colourless
Odour	like: alcohol
Odour threshold	No data available

#### Other physical and chemical parameters

pH (value)	(neutral)
Melting point/freezing point	-114 °C (data apply to the main component)
Initial boiling point and boiling range	78 °C (data apply to the main component)
Flash point	22 °C
Evaporation rate	no data available
Flammability (solid, gas)	not relevant (fluid)
<u>Explosive limits</u>	
• lower explosion limit (LEL)	3.5 vol% (50 g/m <sup>3</sup> ) (data apply to the main component)
• upper explosion limit (UEL)	15 vol% (330 g/m <sup>3</sup> ) (data apply to the main component)
Explosion limits of dust clouds	not relevant
Vapour pressure	59 hPa at 20 °C (Data apply to the main component)
Density	0.88 g/cm <sup>3</sup>
Vapour density	This information is not available.
Bulk density	Not applicable
Relative density	Information on this property is not available.
<u>Solubility(ies)</u>	
Water solubility	miscible in any proportion
<u>Partition coefficient</u>	
n-octanol/water (log KOW)	This information is not available.



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Auto-ignition temperature	425 °C - (data apply to the main component)
Decomposition temperature	no data available
Viscosity	
• kinematic viscosity	1.364 mm <sup>2</sup> /s
• dynamic viscosity	1.2 mPa s at 20 °C (data apply to the main component)
Explosive properties	Shall not be classified as explosive
Oxidising properties	none

### 9.2 Other information

Temperature class (EU, acc. to ATEX)	T2 (Maximum permissible surface temperature on the equipment: 300°C)
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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Risk of ignition. Vapours can form explosive mixtures with air.

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 Possibility of hazardous reactions

Violent reaction with: Alkaline earth metal, Alkali metals, Oxidisers, Phosphorus oxides (e.g. P<sub>2</sub>O<sub>5</sub>), Peroxides, Acetic anhydride, Nitric acid, Nitrate, Perchlorates,  
=> Explosive properties

### 10.4 Conditions to avoid

UV-radiation/sunlight. - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 10.5 Incompatible materials

Rubber articles, different plastics

### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity of components of the mixture						
Name of substance	CAS No	EC No	Exposure route	Endpoint	Value	Species
Ethanol	64-17-5	200-578-6	inhalation: vapour	LC50	95.6 mg/l/4h	rat
Ethanol	64-17-5	200-578-6	oral	LD50	7,060 mg/kg	rat
2-Butanone	78-93-3	201-159-0	dermal	LD50	6,480 mg/kg	rabbit

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Acute toxicity of components of the mixture						
Name of substance	CAS No	EC No	Exposure route	Endpoint	Value	Species
2-Butanone	78-93-3	201-159-0	oral	LD50	2,054 mg/kg	rat
2-Propanol	67-63-0	200-661-7	inhalation: vapour	LC50	37.5 mg/l/4h	rat
2-Propanol	67-63-0	200-661-7	oral	LD50	5,045 mg/kg	rat
2-Propanol	67-63-0	200-661-7	dermal	LD50	12,800 mg/kg	rabbit
Bitrex	3734-33-6		oral	LD50	584 mg/kg	rat

### Acute toxicity

Shall not be classified as acutely toxic.

### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

### Serious eye damage/eye irritation

Causes serious eye irritation.

### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

### Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

#### • Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

#### • Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

### Symptoms related to the physical, chemical and toxicological characteristics

#### • If swallowed

vomiting, abdominal pain, nausea, Causes damage to liver through prolonged or repeated exposure if swallowed

#### • If in eyes

Causes serious eye irritation

#### • If inhaled

vertigo, Inebriation, breathing difficulties, narcosis

#### • If on skin

Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation)

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### Other information

None

## SECTION 12: Ecological information

### 12.1 Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

#### Aquatic toxicity (acute)

##### Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Ethanol	64-17-5	LC50	8,140 mg/l	orfe (Leuciscus idus)	96 h
Ethanol	64-17-5	EC50	9,000 – 14,000 mg/l	daphnia magna	48 h
2-Butanone	78-93-3	LC50	2,993 mg/l	fish	96 h
2-Butanone	78-93-3	EC50	308 mg/l	aquatic invertebrates	48 h
2-Butanone	78-93-3	ErC50	1,972 mg/l	algae	72 h
2-Propanol	67-63-0	LC50	10,000 mg/l	fish	96 h

#### Aquatic toxicity (chronic)

##### Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-Propanol	67-63-0	LC50	>10,000 mg/l	aquatic invertebrates	24 h

### 12.2 Process of degradability

Data are not available.

#### Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
Ethanol	64-17-5	biotic/abiotic	94 %	d
2-Butanone	78-93-3	oxygen depletion	98 %	28 d
2-Propanol	67-63-0	biotic/abiotic	95 %	21 d
2-Propanol	67-63-0	oxygen depletion	53 %	5 d

### 12.3 Bioaccumulative potential

Data are not available.

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### Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Ethanol	64-17-5		-0.31	
2-Butanone	78-93-3		0.3 (pH value: 7, 40 °C)	
2-Propanol	67-63-0		0.05	

#### 12.4 Mobility in soil

Data are not available.

#### 12.5 Results of PBT and vPvB assessment

Data are not available.

#### 12.6 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.



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### SECTION 14: Transport information

<b>14.1</b>	UN number	<b>1170</b>
<b>14.2</b>	UN proper shipping name Hazardous ingredients	<b>ETHANOL SOLUTION</b> Ethanol, 2-Butanone
<b>14.3</b>	Transport hazard class(es)	
	Class	3 (flammable liquids)
<b>14.4</b>	Packing group	II (substance presenting medium danger)
<b>14.5</b>	Environmental hazards	none (non-environmentally hazardous acc. to the dangerous goods regulations)
<b>14.6</b>	<b>Special precautions for user</b>	
	Provisions for dangerous goods (ADR) should be complied within the premises.	
<b>14.7</b>	<b>Transport in bulk according to Annex II of MARPOL and the IBC Code</b>	
	The cargo is not intended to be carried in bulk.	
<b>14.8</b>	<b>Information for each of the UN Model Regulations</b>	
	<b>• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)</b>	
	UN number	1170
	Proper shipping name	ETHANOL SOLUTION
	Particulars in the transport document	UN1170, ETHANOL SOLUTION, 3, II, (D/E)
	Class	3
	Classification code	F1
	Packing group	II
	Danger label(s)	3
		
	Special provisions (SP)	144, 601
	Excepted quantities (EQ)	E2
	Limited quantities (LQ)	1 L
	Transport category (TC)	2
	Tunnel restriction code (TRC)	D/E
	Hazard identification No	33
	<b>Emergency Action Code</b>	2YE
	<b>• International Maritime Dangerous Goods Code (IMDG)</b>	
	UN number	1170
	Proper shipping name	ETHANOL SOLUTION

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Particulars in the shipper's declaration	UN1170, ETHANOL SOLUTION, 3, II, 22°C c.c.
Class	3
Marine pollutant	-
Packing group	II
Danger label(s)	3



Special provisions (SP)	144
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
EmS	F-E, S-D
Stowage category	A

### • International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	1170
Proper shipping name	Ethanol solution
Particulars in the shipper's declaration	UN1170, Ethanol solution, 3, II
Class	3
Packing group	II
Danger label(s)	3



Special provisions (SP)	A3, A58, A180
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L

## SECTION 15: Regulatory information

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

#### Relevant provisions of the European Union (EU)

##### • Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)

None of the ingredients are listed.

##### • Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)

None of the ingredients are listed.

##### • Regulation 850/2004/EC on persistent organic pollutants (POP)

None of the ingredients are listed.

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### • Restrictions according to REACH, Annex XVII

Name of substance	CAS No	Wt%	Type of registration	Conditions of restriction	No
Ethanol		100	1907/2006/EC annex XVII	R3	3
Ethanol		70	1907/2006/EC annex XVII	R40	40
2-Propanol		1	1907/2006/EC annex XVII	R40	40
2-Butanone		1	1907/2006/EC annex XVII	R40	40

#### Legend

R3

1. Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
  - tricks and jokes,
  - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
2. Articles not complying with paragraph 1 shall not be placed on the market.

3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:

- can be used as fuel in decorative oil lamps for supply to the general public, and,
- present an aspiration hazard and are labelled with R65 or H304,

4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).

5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:

- lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage';
- grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung damage';
- lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.

6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.

7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.

R40

1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- 'whoopie' cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: 'For professional users only'.

3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).

4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

### • Restrictions according to REACH, Title VIII

None.

### • List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

none of the ingredients are listed

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### • Seveso Directive

#### 2012/18/EU (Seveso III)

No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes
P5c	flammable liquids (cat. 2, 3)	5,000	50,000	51)

#### Notation

51) Flammable liquids, categories 2 or 3 not covered by P5a and P5b

### • Directive 75/324/EEC relating to aerosol dispensers

#### Filling batch

#### Deco-Paint Directive (2004/42/EC)

VOC content	72 %
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#### Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content	72 %
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#### Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

None of the ingredients are listed.

#### Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

#### Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

None of the ingredients are listed.

#### Regulation 98/2013/EU on the marketing and use of explosives precursors

none of the ingredients are listed

#### Regulation 111/2005/EC laying down rules for the monitoring of trade between the Community and third countries in drug precursors

Name of substance	CAS No	Classification	CN Code	Threshold level
2-Butanone	78-93-3	Category 3	2914 12 00	

### National inventories

Country	National inventories	Status
AU	AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed



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Country	National inventories	Status
KR	KECI	all ingredients are listed
MX	INSQ	all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

### Legend

AICS	Australian Inventory of Chemical Substances
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

## 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### 16.1 Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.2		Pictograms: change in the listing (table)	yes
3.2		Description of the mixture: change in the listing (table)	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
8.1		Biological limit values: change in the listing (table)	yes
8.1		• relevant DNELs of components of the mixture: change in the listing (table)	yes
8.1		• relevant PNECs of components of the mixture: change in the listing (table)	yes
14.2	Hazardous ingredients: Ethyl alcohol	Hazardous ingredients: Ethanol, 2-Butanone	yes
14.3	Transport hazard class(es)	Transport hazard class(es): class 3 hazard - flammable liquids	yes

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### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2000/39/EC	Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC
Acute Tox.	acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF	bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
CN Code	Combined Nomenclature
COD	chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	seriously damaging to the eye
Eye Irrit.	irritant to the eye
Flam. Liq.	flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	the Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	indicative occupational exposure limit value
log KOW	n-octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic

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Abbr.	Descriptions of used abbreviations
PNEC	Predicted No-Effect Concentration
ppm	parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	short-term exposure limit
STOT SE	specific target organ toxicity - single exposure
SVHC	Substance of Very High Concern
TWA	time-weighted average
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative
WEL	workplace exposure limit

### Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)
- Dangerous Goods Regulations (DGR) for the air transport (IATA)
- International Maritime Dangerous Goods Code (IMDG)

### List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H225	highly flammable liquid and vapour
H302	harmful if swallowed
H319	causes serious eye irritation
H336	may cause drowsiness or dizziness

### Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.