

Safety Data Sheet  
According to 1907/2006/EG, Article 31  
modification (EG) no. 453/2010

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

### **1.1 Product identifier**

Trade name: **Ethyl Alcohol 96% with 3% IPA, 3% MEK and Bitrex**

REACH registration number: 01-2119457610-43  
Article number: P50087  
CAS nr.: 64-17-5  
EINECS nr.: 200-578-6

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

**Application of the substance/ the preparation:** Diluents / Chemical industry / Professional use.

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

#### **Manufacturer /Supplier:**

SASMA B.V.  
Heliumstraat 8  
2718 SL Zoetermeer  
T. +31-(0)79-3633064  
@ sales@sasmabv.com  
W www.sasmabv.com

**Further information obtainable from:** SASMA B.V.

### **1.4 Emergency Telephone number:**

**USA and Canada:** For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night  
Within USA and Canada: **1-800-424-9300 CCN634134 or +1 703-527-3887** (collect calls accepted)  
**The Netherlands:** Phone: **030-274 88 88**, National Poisoning Centre  
(Only to inform doctors in case of accidental poisoning)

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## **SECTION 2: Hazards identification**

### **2.1 Classification of the substance or mixture**

**Classification according to Regulation (EG) no. 1272/2008**



GHS02 flammable

Flam. Liq. 2 H225 Highly flammable liquid and vapour.  
Eye Irrit. 2 H319 Causes serious eye irritation.



GHS07

Classification according to Directive 67/548/EEG or Directive 1999/45/EG



R11: Highly flammable

**Information concerning particular hazards for human and environment:**

The product has to be labelled according to the calculation procedure of the “General Classification guideline for preparations of the EU”, in the latest valid version.

**Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 2.2 Label elements

### Labelling according to Regulation (EG) no. 1272/2008

The product is classified and labelled according to the CLP regulation.

### Hazard pictograms



**GHS02**



**GHS07**

**Signal word:** Danger

**Hazard statements:** H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.

**Precautionary statements:** P210 Keep away from heat/sparks/open flames/hot surfaces – no smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion proof electrical/ventilation/lighting, ventilating equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P264 Wash hands, forearms, and exposed areas thoroughly after handling.  
P280 - Wear eye protection, protective gloves, protective clothing.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

P337+P313 - If eye irritation persists: Get medical advice/attention.

P370+P378 - In case of fire: Use appropriate media to extinguish.

P403+ P235 Store in a well-ventilated area. Keep cool.

P501 Dispose of contents/container according to the local/ regional/ national/ international regulations.

## 2.3 Other hazards

No further relevant information available.








## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Inapplicable.

### 3.2 Mixtures

**Description:** Mixtures of substances listed below with non hazardous additions.

<b>Dangerous components</b>			
Ethanol	CAS: 64-17-5 EINECS: 200-578-6 Reg. nr.: 01-2119457610-43	89% vol.- 81% vol.	 F;R11 S 2-7-16  Flam. Liq. 2, H225  Eye Irrit. 2A, H319
Water	CAS: 7732-18-5 EINECS: 231-791-2	4,9% vol.- 3,1% vol.	Not classified
Propaan-2-ol	CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25	3-5% vol.	 F R11, R67;  Xi R36; S 2-7-16-24/25-26  Flam. Liq. 2, H225;  Eye irrit. 2, H319; STOT SE 3, H336
MEK	CAS: 78-93-3 EINECS: 201-159-0 Regnr.: 01-2119457290-43	3-5% vol.	F:R11, XiR36; R66, R67 STOT SE3: H3366; Eye Irrit. 2: H319; Flam. Liq. 2: H225
Bitrex	CAS: 3734-33-6 EINECS: 223-095-2 Reg.nr.: Registratie datum 2018	0,001-1% vol.	Xn, R22-R36/37/38 Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H302, H315, H319, H335

### **Additional information:**

For possible hazards please refer to section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General:** Remove contaminated clothing immediately.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Rinse with plenty of water.

**After eye contact:** Rinse opened eye for several minutes under running water. Consult a physician if symptoms persist.

**After swallowing:** Rinse mouth with water and then drink a lot of water. DO NOT induce vomiting. In case of swallowing consult a physician immediately and show packaging or label.

**4.2 Most important symptoms and effects, both acute and delayed:** No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed:** No further relevant information available.

## **SECTION 5: Fire fighting measures**

### **5.1 Extinguishing media**

**Suitable extinguishing media:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with alcohol resistant foam.

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

No further relevant information available.

### **5.3 Advice for fire fighters**

**Protective equipment:** Keep containers/tanks cool with water spray.

## **SECTION 6: Accidental release measures**

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

Make sure the work area is well ventilated. Keep away from ignition sources. Do not smoke.

### **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

**6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

### **6.4 Reference to other sections:**

See Section 8 for information on personal protection equipment.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling:**

Keep away from ignition sources – Do not smoke. Take measures for the discharge of static electricity. Only use explosion proof equipment.

**Information about fire- and explosion protection:** Remove each possible lighting source (open fire, sparks, smoking.)

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

**Storage:**

**Requirements for storage rooms and tanks:** No special requirements.

**Information about storage in a joint storage facility:** No special requirements.

**Further information about storage conditions:** Keep containers tightly closed. Store cool and dry in closed container.

### **7.3 Specific end use(s):** Consult technical guidelines before using this product.

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

**Additional information about the design of technical facilities:** No further data; see section 7.

### **8.1 Control parameters**

<b>Ingredients with values that require monitoring at the work place:</b>
The product does not contain any relevant quantities of materials with critical values that

have to be monitored at the work place.		
<b>64-17-5 ethanol</b>		
<b>MAC</b>	TGG 8H (mg/m <sup>3</sup> )	260 mg/m <sup>3</sup>
<b>MAC</b>	TGG 15 min (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
<b>OSHA PEL</b>	(ppm) / (mg/m <sup>3</sup> )	1000 ppm / 1900 mg/m <sup>3</sup>
<b>OSHA PEL</b>	8 hour TWA (ppm)	1000 ppm
<b>NIOSH REL</b>	10 hour TWA (ppm)	1000 ppm
<b>ACGIH 2015 TLV</b>	8 hour TWA (ppm)	1000 ppm
<b>67-63-0 propaan-2-ol</b>		
<b>BGW</b>	650 mg/m <sup>3</sup> , 250 ppm	

The product does not contain any components for which MAC values are determined.

DNEL

Ethanol; ethyl alcohol

: End use: Employees  
 Exposure route: Inhalation  
 Possible health problems: Acute effects  
 Toxicity: Local effects  
 Value: 1900 mg/m<sup>3</sup>

End use: Employees  
 Exposure route: Skin contact  
 Possible health problems: Chronic effects  
 Exposure time: 1d  
 Value: 343 mg/kg

End use: Employees  
 Exposure route: Inhalation  
 Possible health problems: Chronic effects  
 Value: 950 mg/m<sup>3</sup>

End use: Consumers  
 Exposure route: Inhalation  
 Possible health problems: Acute effects  
 Toxicity: Local effects  
 Value: 950 mg/m<sup>3</sup>

End use: Consumers  
 Exposure route: Skin contact  
 Possible health problems: Chronic effects  
 Exposure time: 1d  
 Value: 206 mg/kg

End use: Consumers  
 Exposure route: Inhalation  
 Possible health problems: Chronic effects  
 Value: 114 mg/m<sup>3</sup>

End use: Consumers  
Exposure route: Swallowing  
Possible health problems: Chronic effects  
Toxicity: 1d  
Value: 87 mg/kg

## PNEC

Ethanol; ethyl alcohol : freshwater  
Value: 0,96 mg/l

Seawater  
Value: 0,79 mg/l

Freshwater deposition  
Value: 3,6 mg/kg

Soil  
Value: 0,63 mg/kg

## 8.2 Exposure control measures:

### Technical measures:

Make sure there is enough ventilation in the working area.

### Personal protective equipment:

**General protective and health measures:** Wash hands before every break and after work.

**Respiratory protection:** No personal respiratory protective equipment normally required. In case of insufficient ventilation, exceeding workplace limits to serious odour or release of aerosols, mists and smoke use one of the environment-independent breathing mask or breathing mask with filter type A or accordingly combination filter ( in the presence of aerosols, mists and smoke, for example. A-P2 or use ABEK-P2) according to EN 141.

**Protection of hands:** The materials of the gloves have to be impermeable and resistant to the product/ the substance/ the preparation/ the chemical mixture. Choose the glove material with consideration of the penetration times, rates of diffusion and the degradation.

### Material of gloves:

The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and therefore has to be checked prior to the application.

### Full contact:

Glove material: butyl rubber  
Glove thickness: 0,7 mm  
Break through time: > 480 min

### Splash contact

Glove material: Nitrile  
Glove thickness: 0,40 mm  
Break through time: > 120 min

### Penetration time of glove material:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be taken into account.

**Eye protection:**



Wear safety goggles.

**Protective measures:**

Do not induce vapours or spray mist.

**Hygiene measures:**

Take off immediately all contaminated clothing.

**Environmental exposure:**

Do not flush into surface water or sanitary sewer system. Avoid penetration into the soil. Do not allow material to contaminate ground water.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties.**

**General Information:**

Appearance:

Physical state at 20 °C:	Liquid
Colour:	Colourless, clear liquid.
Odour:	Characteristic (Alcoholic)
Odour threshold:	Not determined.
pH:	6 – 9 (depends on oxygen ingress).
State change:	Not determined
Melting point:	ca. -144 °C
Boiling point:	78,2 °C, 1.013hPa
Flash point:	12 °C ASTM D 56
Flammability (solid, gas):	Not determined
Ignition temperature:	425 °C
Decomposition temperature:	Not determined
Self ignition:	363°C
Danger of explosion:	Product is not an explosion hazard but it is possible that explosion hazardous vapour and air mixtures will form.
Explosion limits:	
Bottom:	3,5 vol %
Upper:	15,0 vol %
Vapour pressure at 20 C:	58,5 hPa, 20 °C 78,7 hPa, 25°C
Density:	0,8 g/cm <sup>3</sup> at 20 °C 0,785 g/cm <sup>3</sup> at 25 °C
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility:	Fully miscible
Ratio coefficient N-octanol/water:	Not determined.

## Viscosity

Dynamic:	Not determined
Kinematic:	Not determined

## 9.2 Other information

No further relevant information available.

## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

### **10.2 Chemical stability**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**10.3 Possible hazardous reactions:** No dangerous reactions known.

**10.4 Conditions to avoid:** No further relevant information available.

**10.5 Incompatible materials:** No further relevant information available.

**10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## **SECTION 11: Toxicological information**

### **11.1 Information of toxicological effects**

#### **Components**

#### **Ethanol; Ethyl alcohol:**

##### Acute oral toxicity:

LD50:>2.000 mg/kg, rat, OECD test directive 401, GLP: no, (literature value)

##### Acute toxicity with inhalation:

LC50:> 20mg/l, 4 h, mouse, (literature value)

##### Acute dermal toxicity:

LD50:>2.000 mg/kg, rabbit, OECD test directive 402, GLP: no, (literature value)

##### Skin corrosion/ irritation:

Rabbit, result: non corrosive, OECD test directive 404, GLP, no (literature value)

##### Serious eye injury/eye irritation:

Rabbit, result: some irritation, OECD test directive 405, GLP, no (literature value)

##### Sensibilisation of airways/skin:

Maximalisation test, guinea pig, result: Not sensitizing, OECD test directive 406, GLP: yes, (literature value)

#### **Mutagenicity in gametes:**

##### Genotoxicity in vitro

Ames test, Salmonella typhimurium, with and without, result: non mutagen, OECD test directive 471, GLP: no, (literature value)

##### Further information:

No further relevant information.



## **SECTION 12: Ecological information**

### **12.1 Toxicity**

#### **Components**

##### **Ethanol; ethyl alcohol:**

##### Toxicity for fish:

LC50:> 100 mg/l, 48h, Leuciscus Idus, static test, OECD test directive 203, GLP: no, (literature value)

##### Toxicity for daphnia's and other invertebrate aquatic animals:

EC50:> 100 mg/l, 24h, Daphnia magna, static test, OECD test directive 202, GLP: yes, (literature value)

##### Toxicity for algae:

EC50:> 100 mg/l, Chlorella pyrenoidosa static test, OECD test directive 201, GLP: no, (literature value)

### **12.2 Persistence and degradability**

#### **Components**

##### **Ethanol; ethyl alcohol:**

##### Biological degradability:

Aëroob,>70% Result: Easily biologically degradable, exposure time: 5d, OECD test directive 301 D, GLP: no, (literature value)

**12.3 Bioaccumulation:** No further relevant information.

**12.4 Mobility in soil:** No further relevant information.

### **Additional ecological information:**

#### **General information:**

Water hazard class 1 (D) (Self classification): danger to water small.

Do not allow undiluted product or large quantities to reach ground water, surface water or sewage system. Water hazard class (NL) 11: Little damage to no damage to aquatic organisms.

#### **Results of PBT- en zPzB-assessment (BCF)**

**PBT:** Ethanol is not considered to be persistent, bioaccumulative, or toxic.

**zPzB:** Ethanol is not considered to be very persistent or very bioaccumulative.

**Other hazardous effects:** No further relevant information.

## **SECTION 13: Disposal considerations**

### **13.1 Disposal method:**

#### Product:

Product can be burned but it must be done according to official regulation.

#### Uncleaned packaging:

Contaminated packaging must be completely emptied. They can be recycled after cleaning.

## **SECTION 14: Transport information**

### **14.1 UN number**

**ADR** : 1987

**RID** : 1987

**IMDG** : 1987

**IATA** : 1987

## 14.2 UN proper shipping name

**Proper shipping name** Ethanol n.e.g.  
**Description Transport document** UN1987 Ethanol, n.e.g. (Ethanol, IPA, MEK, Bitrex), 3, II, (D/E)

## 14.3 Transport hazard class

**ADR** : 3



**RID** : 3

**IMDG** : 3

**IATA** : 3



## 14.4 Packing group

### ADR

Packing Group : II  
 Classification code : F1  
 Hazard identification number : 33  
 Etiketten : 3  
 Tunnel restriction code : (D/E)

### RID

Packing Group : II  
 Classification code : F1  
 Hazard identification number : 33  
 Labels : 3

### IMDG

Packing Group : II  
 Labels : 3  
 EMS number : F-E, S-D

### IATA

Packaging instructions : 307  
 (freight plane)  
 Packing group : II  
 Labels : 3

## 14.5 Environmental hazards:

### ADR

Hazardous for environment : no

## IMDG

Marine pollutant : no

## IATA

Hazardous for environment : no

### 14.6 Special precautions for user

No further relevant information available.

### 14.7 Transport in bulk according to annex II at MARPOL 73/78 and the IBC-code

Pollution category: Z

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### UN “Model regulation”

UN 1987; Ethanol n.e.g. (Ethanol, IPA, MEK, Bitrex); 3; II;  
(D/E)

## SECTION 15: Regulatory information

### 15.1 Specific safety, health and environment regulations and – legislation for the substance or the mixture.

Regulatory information about hazard with heavy accidents:

96/82/EC

Highly flammable

Amount 1: 5.000 t

Amount 2: 50.000 t

### Notification status

EINECS : On or in compliance with the list

TSCA : On the TSCA-list

AUSTR : On or in compliance with the list

DSL : All components of this product are on the Canadese DSL list

ENCS : On or in compliance with the list

KOREA : On or in compliance with the list

PHIL : On or in compliance with the list

CHINA : On or in compliance with the list

ISHL : On or in compliance with the list

NZIOC : On or in compliance with the list

**Water hazard class:** Water hazard class (NL) 11: Sanitation B.

### 15.2 Chemical safety assessment:

A chemical safety assessment has been done for this product.

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific features and shall not establish a legally valid contractual relationship.

**Relevant phrases:**

H225 Highly flammable liquid and vapour.  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
R11 Highly flammable.  
R22 Harmful if swallowed.  
R36 Irritating to eyes.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.

**Abbreviations:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).  
IMDG: International Maritime Code for Dangerous Goods.  
IATA: International Air Transport Association.  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
ELINCS: European List of Notified Chemical Substances.  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
LC50: Lethal concentration, 50 percent.  
LD50: Lethal dose, 50 percent.

**Further information**Further information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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