

## Section 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**ERG Clean Skin**

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

General use: A product for hygienic and surgical hand disinfection and for disinfecting surfaces of materials, equipment and furniture.

Uses advised against: disinfection of surfaces used in direct contact with food and feed.

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

Boryszew S.A.

ERG Boryszew Branch in Sochaczew

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phone: 46 863 02 01

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website: [boryszewerg.com.pl](http://boryszewerg.com.pl)

email: [certyfikacja@boryszewerg.com.pl](mailto:certyfikacja@boryszewerg.com.pl)

### 1.4. Emergency telephone number

Tel.: 112 (general emergency telephone number)

## Section 2. Hazard identification

### 2.1. Classification of the substance or mixture

Classification according to Regulation 1272/2008 (CLP)

Mixture was classified as hazardous

Flam. Liq. 2

H225 Highly flammable liquid and vapour.

Eye Irrit.

2 H319 Causes serious eye irritation.

### 2.2 Labelling elements:

Warning phrase: **Danger**

Pictogram:



### Hazard statements

H225 Highly flammable liquid and vapour.

H319 Irritant to eyes.

### Precautionary statements

#### Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not smoke.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P303+P361+P353 IN CONTACT WITH SKIN (or with hair): Immediately remove/take off all the contaminated clothes. Rinse skin with water [shower].

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

**Storage**

P403+P235 Store in a well ventilated place. Keep cool.

Disposal P501 Dispose of the contents/container to a hazardous waste disposal site.

**2.3. Other hazards**

The product does not contain any ingredients meeting the PBT or vPvB criteria in acc. with Appendix XIII. Ethanol may form explosive mixtures of vapours and air.

**Section 3. Composition / information on ingredients****3.1. Substances**

Not applicable

**3.2. Mixtures**

Hazardous Ingredients:

Product identifier	Content [%]	CLP classification	
		Hazard class and category codes	Codes of hazard statements
<b>Ethyl alcohol</b> CAS: 64-17-5 EC: 200-578-6 Index No.: 603-002-00-5 REACH No.: 01-2119457610-43-XXXX	72	Flam. Liq. 2 Eye Irrit. 2	H225 H319
<b>Isopropyl alcohol</b> CAS: 67-63-0 EC: 200-661-7 Index No.: 603-117-00-0 REACH No.: 01-2119457558-25-XXXX	7,5	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H335

For the full text of R and H phrases, see Section 16.

**Section 4. First-aid measures****4.1. Description of first aid measures****In case of inhalation**

Put a victim in the recovery position. If required – perform artificial respiration and seek medical assistance.

**In case of swallowing**

Rinse mouth. Give 1-2 glasses of water to drink. If a victim is conscious, induce vomiting or perform gastric lavage. Provide a quiet and warm place to lay down. If necessary, provide medical attention.

**Eye contact**

Remove contact lenses. Wash contaminated eyes with plenty of water for 15 minutes, with open eyelids. Provide ophthalmologist care if necessary.

#### **Skin contact**

Change contaminated clothing. Clean the contaminated skin, wash with plenty of water and then with water containing mild soap. Seek the dermatologist's advice in case of skin irritation.

#### **4.2. Major acute and delayed symptoms and effects of exposure**

Irritation, skin inflammation, dizziness, nausea, vomiting.

#### **Hazards:**

Breathing problems.

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

Premedical help measures should be available at the workstations. First aiders should wear medical gloves.

### **Section 5. Firefighting measures**

#### **5.1. Extinguishing media:**

##### **Suitable extinguishing media**

carbon dioxide CO<sub>2</sub>, fire extinguishing powder, alcohol-resistant extinguishing foam, dispersed water.

##### **Unsuitable extinguishing media**

Do not use a solid water stream onto the substance in fire. This may cause burning substance scatter and therefore fire spread.

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

##### **Combustion products**

Carbon oxide, carbon dioxide and water are formed during combustion process. Explosive mixtures Under favourable thermal conditions, vapours may form explosive mixtures in air.

Vapours are heavier than air and may accumulate at the surface. Containers and other packages with ethanol may explode when exposed to fire or high temperature.

#### **5.3. Advice for firefighters**

##### **Fire suppression**

Use standard chemical fire suppression methods. Cool containers that are exposed to high temperature with water and, if possible, remove from the hazard-exposed area. Disperse vapours with water jets.

##### **Protective equipment for firefighters:**

High temperature resistant clothing. Individual apparatus isolating the respiratory tract. Use the explosimeter.

### **Section 6. Accidental release measures**

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

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

Use appropriate personal protective equipment when handling damaged containers or released product. The persons without personal protection must be kept away.

In case of unintended release of a big amount of mixture, warn users and keep unauthorised persons away from the contaminated area.

#### **6.2. Environmental precautions**

Do not allow the product to contaminate the environment. Secure drains and gutters.

In case of a serious contamination of a watercourse, sewage system or ground, notify appropriate administrative and control authorities and rescue services.

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

Remove all potential ignition sources.

Do not smoke. Secure damaged packaging.

Ventilate the hazard-exposed area and avoid inhalation of vapours. Contain and control the mixture from spreading. Collect the spilled liquid by pumping it out and using incombustible absorbing materials (soil, dry sand, diatomite, vermiculite).

Put the collected mass into a substitute package and deliver for disposal.

### 6.4. References to other sections

Personal protective measures - see section 8 Disposal methods: see section 13

## Section 7. Handling and storage of the substances and mixtures

### 7.1. Precautions for safe handling:

#### Handling instructions

Prevent the occurrence and spreading of fire. Do not smoke.

Avoid aerosol formation.

Avoid contact with eyes or skin.

Prevent from entering drainage system.

#### General provisions of occupational health and safety

Do not eat, drink or smoke when using this substance.

Replace contaminated clothing. Thoroughly wash hands after use.

Wash contaminated clothing before reuse. Do not take contaminated clothing outside the workplace.

Wash hands and face before taking a break at work.

### 7.2. Conditions of safe storage, including information on mutual incompatibilities

Storage rooms must be ventilated (possibility of forming explosive mixtures with air). Keep container tightly closed.

Store only in the original containers. Store in cool dry place. Storage temperature 5 – 30°C.

Keep away from moisture.

Empty containers should be carefully cleaned, closed and kept standing upright.

Avoid contact of the product with strongly oxidizing substances.

Do not use close to a naked flame or other possible sources of ignition.

Store away from flammable and oxidizing materials.

Use non-sparking tools only.

Read the Material Safety Data Sheet.

### 7.3. Special end-use(-s)

No data available

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters:

The nationwide maximum permissible values of concentrations in the working environment in acc. with the Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on maximum permissible concentration and intensity of agents harmful to health in the working environment (Journal of Laws of 2018 item 1286)

Exposure limit values.

Maximum acceptable concentration (mg/m<sup>3</sup>) in the workplace effective in Poland:

Specifications	MAC	STEL	TWA
	mg/m <sup>3</sup>		
Ethanol	1900	-	-

#### DNEL

CAS 64-17-5 ethanol

Employees	skin	DNEL – long-term system exposure limit	343 mg/kg b.w.
Employees	inhalation	DNEL – long-term system exposure limit	950 mg/m <sup>3</sup>
Employees	skin	DNEL – short-term system exposure limit	1900 mg/kg b.w.
Consumers:	skin	DNEL – long-term system exposure limit	206 mg/kg b.w.
Consumers:	oral	DNEL – long-term system exposure limit	87 mg/kg b.w.
Consumers:	inhalation	DNEL – long-term system exposure limit	114 mg/m <sup>3</sup>
Consumers:	skin	DNEL – short-term system exposure limit	950 mg/kg b.w.
Consumers:	skin	DNEL – short-term system exposure limit	850 mg/kg b.w.

#### PNEC

CAS 64-17-5 ethanol

freshwater	0.96 mg/l
freshwater sediment	3.6 mg/kg
seawater	0.79 mg/l
microorganisms during waste treatment	580 mg/l
soil	0.63 mg/kg
STP	2.75 mg/l

#### 8.2. Exposure controls

**Not applicable if the product is used as intended.**

##### Appropriate engineering controls

Storage rooms and workplaces must be well-ventilated to keep the vapours concentration in air below the permissible values.

Electrical units in anti-explosive configuration.

##### Personal protection measures

###### Eye and face protection

Wear splash-proof eye goggles in acc. with EN 166.

###### Skin protection

###### Hand protection

In case of risk, wear protective gloves in acc. with EN374 requirements.

Recommended materials for gloves:

Butyl rubber, thickness: 0.7 mm

Nitrile rubber, thickness of gloves: >0.3 mm

Penetration time of glove material ≥ 240 min.

Regular gloves change is recommended and in case of evident wear, damage (tear, puncture) or change in appearance (colour, elasticity, shape), replace gloves immediately. Recommended use of protective cream onto exposed parts of the body.

Learn about resistance to chemicals (breakthrough time, penetration and degradation speed) and application frequency.

Use protective cream onto exposed parts of the body.

### Body protection

Wear suitable protective clothing against chemical risks. Type of protective equipment must be appropriate to concentration and amount of hazardous substance in particular working environment.

### Respiratory protection

In case of hazard in atmosphere with substance vapours, use independent respiratory protection with A gas filter and P2 particle filter in acc. with EN 149.

Exposure controls Ethanol is totally biodegradable in the environment.

## Section 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Volatile, clear liquid
Odour:	characteristic for ethanol
Odour threshold:	No data available
pH:	neutral
Melting/freezing point:	-114° C [ethanol]
Initial boiling point and boiling points range:	80° C [ethanol]
Ignition temperature:	19° C [ethanol]
Evaporation rate:	No data available
Flammability (solid, gas):	Flammable
Upper/lower flammability limit or upper/lower explosion limit:	upper 13.5 % by volume [ethanol] lower 2,5% by volume [ethanol]
Vapour pressure (20° C):	No data available
Density:	0,84 – 0,90 g/cm <sup>3</sup> (20° C)
Solubility:	Dissolves in water
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	373 ° C [ethanol]
Decomposition temperature:	Not applicable
Viscosity:	Not applicable
Explosive properties:	Vapours may form explosive mixtures with air
Oxidising properties:	Not applicable

### 9.2. Other information

None

## Section 10. Stability and reactivity

### 10.1. Reactivity

When stored and used correctly, the product is not chemically reactive.

### 10.2. Chemical stability

In correct storage and usage conditions the product is chemically stable.

### 10.3. Possibility of hazardous reactions

Unknown.

#### 10.4. Conditions to avoid

Keep away from oxidizing agents, strong heat sources, i.e. sun radiation and flames.

#### 10.5. Incompatible materials

May cause ignition or gases or vapours when in contact with alkaline metals, alkaline metal salts, alkaline metal hydroxides, alkaline earth metals, powder metals, metal oxides, metal salts, non-metals, non-metal oxides, aldehydes, alcohols, amines, ammonia, hydrazine and derivatives, combustible hydrides, ethers, acids, anhydrides, oxidizing agents, organic substances, peroxy compounds, contamination/dusts, permanganates, organic solvents, organic nitro compounds, brass.

#### 10.6. Hazardous decomposition products

They do not occur when used as intended.

### Section 11. Toxicological information

#### 11.1. Information on toxicological effects

##### Acute Toxicity

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

Ethanol CAS 64-17-5

DL100 for an adult is approximately 7-8 g/kg monthly

LDLO (oral, man): 6000 mg/ kg monthly

LDLO (oral, rat): 7060 mg/ kg monthly

LC50 (fish): > 10000 mg/l

##### Chronic toxicity

LD50 (oral, rat): 6.2 – 15g/kg monthly

LC50 (inhalation, rat): > 50mg/l (4h)

##### Corrosive/irritant to skin

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

##### Serious eye damage/irritation to eyes:

Irritant to eyes. Test performed in acc. with the OECD 405 guidelines generally demonstrate average eye irritation. All effects cease within 8 to 14 days

##### Sensitising to the respiratory tract or skin

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

##### Mutagenicity on reproductive cells

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

Carcinogenicity - rat: NOAEL >3000mg/kg

mouse: female NOAEL >4400 mg/kg,

mouse: male NOAEL >4250 mg/kg

BMDL10=1400 mg/kg based on simultaneous data controls

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

##### Reproductive toxicity

Fertility: NOAEL (oral, mouse) = 13.8 g/kg (OECD416)

NOAEC (inhalation, rat) >16,000 ppm

Developmental toxicity (OECD414)

NOAEL (oral) = 5.2 g/kg mc/daily

NOAEC (inhalation) = 39 mg/l

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

**Target organ toxicity - single exposure:**

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

**Target organ toxicity - repeated exposure**

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

**Aspiration hazard:**

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

**Probable exposure routes**

Inhalation is the most probable way of exposure in case of standard applications of the product. Absorption through skin may occur only after longer exposition in closed conditions. The substance is quickly absorbed after consumption.

**Health effects of acute exposure:**

Ethanol causes serious illnesses of digestive organs (inflammation of the gastric mucosa), cardiovascular system, liver and nervous system.

**Health effects of chronic exposure**

Persons who are chronically exposed to breathing the air containing ethanol may suffer from irritation of mucous membranes of eyes and respiratory track, pains and dizziness, excitement or drowsiness, problems with digestive system, liver and kidneys.

**Toxicological effects**

Irritation of mucous membranes of eyes and respiratory track, pains and dizziness, excitement or drowsiness, problems with digestive system, liver and kidneys

**Section 12. Ecological information**

**12.1. Toxicity**

Acute toxicity Fish: 9000 mg/dm<sup>3</sup> /24 hrs

EC50 Carassius auratus: 0,25 cm<sup>3</sup> /dm<sup>3</sup> /6 hrs

Crustaceans: EC50 Daphnia magna : 7800 mg/dm<sup>3</sup>

Bacteria EC50 : Pseudomonas putida : 6500 mg/dm<sup>3</sup>

Algae IC50 Scenedesmus quadricauda : 5000 mg/dm<sup>3</sup>

Microcystis aeruginosa EC50: 1450 mg/dm<sup>3</sup>

**12.2. Persistence and degradability**

The product is easily biodegradable BOD20=84% The substance is easily biodegradable in the waste treatment plants.

**12.3. Bioaccumulative potential**

Low bioaccumulative properties. logKow 0.1mg/l.

**12.4. Mobility in soil**

The substance disperses quickly when released to air or water. It evaporates quickly when released to soil. The substance is volatile and soluble in water. It degrades between air and water when released to the environment. Poorly absorbed by soil.

**12.5. Results of PBT and vPvB assessment**

No data available

**12.6. Other harmful effects**

No data available



## Section 13. Waste disposal

### 13.1. Methods of waste disposal

The product and packages which have been opened during professional applications should be disposed of as a hazardous waste to an authorised plant.




#### Waste code

Act of 14 December 2012 on wastes (uniform text: Journal of Laws of 2019 item 701 as amended) Regulation of the Minister of Climate of 2 January 2020 on the catalogue of wastes (Journal of Laws of 2020 item 10)

**02 07 02** Wastes from spirits distillation.

The waste code must be assigned individually in the place where waste is produced, depending on the application location branch.

## Section 14. Transport information

	ADR/RID	IMGD	IATA
14.1. UN number	1170	1170	1170
14.2. Correct UN shipping name	ETHANOL (ETHYL ALCOHOL) or ETHANOL (ETHYL ALCOHOL) IN SOLUTION		
14.3. Hazard class(es) in transport	3	3	3
Warning sticker No 3			
14.4. Packing Group	II	II	II
14.5. Environmental hazards	no	no	no
14.6. Special precautions for users	not applicable		
14.7. Bulk transport in accordance with Annex II to MARPOL 73/78 Convention and the IBC Code	Not applicable		

## Section 15. Regulatory information

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

This Safety Data Sheet has been prepared on the basis of:

– Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended

Regulation (EC) No 1272/2008 of 16/12/2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.

– Commission Regulation (EU) no. 2015/830 of 28 May 2015 amending Regulation (EC) no. 1907/2006 of the European Parliament and of the Council on registration, evaluation, authorisation and restriction of chemicals (REACH) with rectification

– Act of 25 February 2011 on the chemical substances and their mixtures (uniform text: Journal of Laws of 2019 item 1225)

- Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on maximum permissible concentration and intensity of agents harmful to health in the working environment (Journal of Laws of 2018 item 1286) – Act of 14 December 2012 on wastes (uniform text: Journal of Laws No. 2019, item 701 as amended)
- Regulation of the Minister of Climate of 2 January 2020 on the catalogue of wastes (Journal of Laws of 2020 item 10)
- Regulation of the Minister of Labour and Social Policy of 26 September 1997 on general provisions of occupational safety and health (uniform text: Journal of Laws of 2003 no. 169 item 1650 as amended)
- Regulation of the Minister of Health of 30 December 2004 on safety and hygiene of work related to chemical factors present at the workplace (uniform text: (Journal of Laws 2016, item 1488).
- Classification of dangerous goods according to European Agreement on the international road transport of dangerous goods (ADR) 15.2. Chemical safety assessment Ethanol was assessed for chemical safety.

### Section 16. Other information

Meaning of risk phrases refer to in Section 3.

3 H225 Highly flammable liquid and vapour.

H319 – Irritant to eyes.

H335 - May cause respiratory tract irritation.

#### Training advice

Read Material Safety Data Sheet before use

#### Explanation of abbreviations and acronyms used in the Material Safety Data Sheet

CAS Number (Chemical Abstracts Service)

EC number means one of the three numbers listed below:

(EINECS) - number assigned to a substance in the European Inventory of Existing Commercial Chemical Substance,

(ELINCS). number assigned to a substance in the European List of Notified Substance

(NLP) - number in the list of chemical substances "No-longer polymers" .

MAC (NDS) - maximum acceptable concentrations of harmful substances in a workplace

STEL – short term exposure limit

NDSP (TLV) – threshold limit value

UN number - material identification number (UNO number, UN number)

ADR - European agreement on the international road transport of dangerous goods

RID - International regulation concerning rail transport of dangerous goods,

IMDG – International Maritime Dangerous Goods

IATA - International Air Transport Association

#### Other sources of information

IUCLID - International Uniform Chemical Information Database ECHA - Website Base of substances registered in acc. with REACH ECHA - C&L Inventory

#### Other information

The product described in this material Safety Data Sheet should be stored and used according to good industrial practice and all relevant regulations. Information contained in this Material Safety Data Sheet based upon the current knowledge provide a product description from regulations on safety, health and environmental protection viewpoint. They should not be understood as a guaranty for certain properties. The user is responsible for ensuring safe usage conditions and takes responsibility for effects of inappropriate usage of this product.