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**1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY**

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**1.1. PRODUCT NAME:****ALCODEX****1.2. IDENTIFIED USES:**

Fast disinfectant for surfaces

**1.3. DETAILS OF THE MANUFACTURER/SUPPLIER:**

Interchemie Werken De Adelaar Eesti AS  
Vanapere tee 14, Püünsi village, Viimsi  
74013 Harju county  
Estonia  
Tel. +372 6 005 005

**1.4. Emergency telephone number (24 h):**

Emergency telephone: Estonia 112  
Estonian Poison Center: 16662

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**2: HAZARDS IDENTIFICATIONS**

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**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

**Physical hazards**

Flam. Liq. 2; H225

**Health hazards**

Eye Irrit. 2; H319

**Environmental hazards**

Aquatic Acute 1, H400  
Aquatic Chronic 3, H412

**2.2 Label elements**

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

**Signal word:** Warning**Hazard pictograms**

GHS02



GHS07



GHS09

**2.3 Hazard statements**

H225: Highly flammable liquid and vapour..

H319: Causes serious eye irritation.

H410: Very toxic to aquatic life with long lasting effects.

**2.4 Precautionary statements**

## Safety Data Sheet

According to Regulation (EC) No 1907/2006  
Date issued: 02.03.2020

ALCODEX

Version: 1.0

- P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.  
P233 Keep container tightly closed.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
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.  
P273 Avoid release to the environment.  
P501 Dispose of contents/container in accordance with local regulations.

**Supplemental hazard information (EU):** Not applicable.

### 2.5 Other hazards

Not applicable.

## 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Hazardous components

INGREDIENT NAME	CAS No. EC No.	% (w/w)	Classification according to Regulation (EC) No 1272/2008
Ethanol 96%	64-17-5 200-578-6	75%	Flam.Liq.2, H225 Eye Irrit..2; H319
Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	CAS nr. 68391-01-5 EC nr. 269-919-4	< 0.25%	Acute Tox.; 4; H302 Acute Tox.; 4; H312 Skin Corr.; 1B; H314. Skin Irrit.; 2; H315. Aquatic Acute; 1; H400 Aquatic Chronic; 1; H410
Quaternary ammonium compounds, Alkyl (C12-14) dimethyl (ethylbenzyl) ammonium chloride (ADEBAC (C12-C14))	CAS nr. 85409-23-0 EC nr. 278-090-7	< 0.25%	Acute Tox.; 4; H302 Acute Tox.; 4; H312 Skin Corr.; 1B; H314 Aquatic Acute; 1; H400

### Additional information:

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

#### 4.1.1. General information:

In case of accident or un-wellness, see medical advice immediately. Provide package/label of Product or Safety Data Sheet of Product if possible for direction.

**4.1.2 Inhalation:** The affected person should be shift to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

**4.1.3 Skin contact:** Take off contaminated clothing and rinse thoroughly with plenty of water. In case of skin irritation consult a physician.

**4.1.4 Eye contact:** Rinse opened eye for several minutes under running water. Remove contact lenses, if present and easy to do. Get medical advice/attention, if irritation develops and persists.

**4.1.5 Ingestion:** Rinse mouth and throat with water. If symptoms occur, seek medical advice.

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

Irritant.

Dizziness, nausea, vomiting, abdominal pain, narcosis, breathing difficulties.

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

None.

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### **5: FIRE FIGHTING MEASURES**

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#### **5.1 Extinguishing media**

**Suitable extinguishing media:**

Only suitable extinguishing media for the surrounding fire should be used.

Water spray, alcohol-resistant foam, dry extinguishing powder, carbon dioxide (CO<sub>2</sub>).

**Improper extinguishing media:** Water jet.

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

Highly flammable. In case of inadequate ventilation and / or use can form explosive gas-air mixtures.

Do not breathe in fumes.

In case of fires, hazardous combustion gases are formed: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>).

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

Vapours are heavier than air and may spread near ground to sources of ignition. Wary of another re-ignition. Only suitable extinguishing media for the surrounding fire should be used. Wear chemical protective clothing and a self-contained breathing apparatus.

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### **6: ACCIDENTAL RELEASE MEASURES**

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

Avoid inhalation of vapours/ spray.  
Avoid contact with skin, eyes, and clothing.

## **6.2 Environmental precautions**

Avoid release to the environment.  
Do not allow entering sewers/ surface or ground water. Risk of explosion.  
Waste or contaminated material must be adequately labelled and disposed of in accordance with the local/national regulations.

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

### **Recommendations to prevent leakage**

Covering drain pipes.

### **Measures for cleaning/collecting:**

Absorb spillage with liquid-binding material (sand, diatomite, acid binders, universal binders).

### **Other information relating to leakage or release to the environment**

Dispose of in an appropriate container for hazardous waste.

## **6.4. Reference to other sections**

Hazardous combustion products: See section 5. Information for personal protection: See section 8.  
Incompatible materials: See section 10. Disposal methods: See section 13.

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## **7: HANDLING AND STORAGE**

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

#### **7.1.1 Information for safe handling**

##### **Measures to prevent fire:**

Keep container tightly closed.  
Keep away from heat, sparks, open flames or other sources of ignition. Take precautionary measures against electrostatic charges.

##### **Information for safe handling:**

Do not eat, drink or smoke during work time. Wash hands, forearms and face thoroughly after handling chemical product. A protective cream may be used.

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

Store in a tightly closed original container in well-ventilated room.  
Keep away from direct sunlight.

#### **7.2.1 Requirements for storage rooms and containers**

Store below 25 °C. Keep out of reach of unauthorized persons.

### 7.2.2 Information on chemical storage

Keep away from food, drink and animal feed.

### 7.3. Specific end use(s)

No further relevant information available.

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## 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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### 8.1 Control parameters

National limits (Estonia)

#### Ethanol - CAS no: 64-17-5

Occupational Exposure Limits.:

Long-term exposure limit (8 hour)	500 ppm
Long-term exposure limit (8 hour)	1.000 mg/m <sup>3</sup>
Short-term exposure limit (15 minutes)	1.000 ppm
Short-term exposure limit (15 minutes)	1.900 mg/m <sup>3</sup>

### Relevant DNELs / DMELs / PNECs and other exposure thresholds

#### Human health values

Measure	Exposure breakthrough	Method of exposure	User	Duration of exposure
DNEL	1.900 mg/m <sup>3</sup>	person, by inhalation	employee (industry)	acute-systematic effects
DNEL	343 mg/kg	Person, skin contact	employee (industry)	chronic-systemic effects
DNEL	950 mg/m <sup>3</sup>	person, by inhalation	employee (industry)	chronic-systemic effects

#### Environmental values

Measure	Exposure breakthrough	In parts of the environment
PNEC	0.79 mg/cm <sup>3</sup>	Sea water
PNEC	2.75 mg/cm <sup>3</sup>	Air
PNEC	3.6 mg/cm <sup>3</sup>	Freshwater sediment
PNEC	580 mg/cm <sup>3</sup>	Wastewater treatment plant (STP)
PNEC	0.63 mg/cm <sup>3</sup>	Earth
PNEC	0.96 mg/cm <sup>3</sup>	Fresh water

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Not required.

#### 8.2.2 Personal protective equipment

Handle in accordance with good industrial hygiene and safety practice.

**Eye protection:** Goggles.

**Hand protection:** Protective gloves. The desired material type is butyl rubber.

**Respiratory protection:** All handling should only take place in well-ventilated areas.

In case of poor ventilation respiratory protective equipment must be used.

### 8.2.3 Environmental exposure controls

Avoid spreading of contamination in drainage pipes, surface water and groundwater.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

9.1.1	Physical state	Liquid
9.1.2	Colour	Clear, colourless
9.1.3	Odour	Odour of alcohol
9.1.4	Initial boiling point (1% solution)	Not determined
9.1.5	pH	6.5 – 7.5
9.1.6	Density (20 <sup>0</sup> C)	0.865-0.860 g/cm <sup>3</sup>
9.1.7	Solubility in water	Miscible with water
9.1.8	Viscosity	Not determined
9.1.9	Melting point	Not applicable
9.1.10	Flash point	Not determined
9.1.11	Partition coefficient: noctanol/ water	Not determined
9.1.12	Vapor pressure	Not determined

## 10. STABILITY AND REACTIVITY

<b>10.1</b>	<b>Reactivity</b>	Risk of ignition. Vapours may form explosive mixtures with air.
<b>10.2</b>	<b>Chemical stability</b>	Stable under normal condition.
<b>10.3</b>	<b>Possibility of hazardous reactions:</b>	Reacts violently with: Alkali metals, Alkaline earth metals, Acetic anhydride, Peroxides, Phosphorus oxides, Strong oxidizer, Salpeter Acid, Nitrate, Perchlorates. Explosive properties.
<b>10.4</b>	<b>Conditions to avoid</b>	Keep away from heat / sparks / open flames / hot surfaces - do not smoke.
<b>10.5</b>	<b>Incompatible materials</b>	Plastic and rubber. Incompatible with anionic surfactants.
<b>10.6</b>	<b>Hazardous decomposition products</b>	See Section 10.

### Additional information

Do not mix with other substances or chemicals.

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## 11. TOXICOLOGICAL INFORMATION

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### 11.1. Information on toxicological effects

#### Acute Toxicity

The mixture is not classified as acutely toxic.

#### **Quaternary ammonium compounds (CAS nr 68424-85-1)**

Acute oral toxicity (LD50): ca 344 mg/kg (rat)

Acute dermal toxicity (LD50): ca 344 mg/kg (rabbit), 24h

#### Primary irritant effect

**Skin contact:** caustic, rabbit, DOT method, 24h

**Eye contact:** caustic, rabbit, DOT method

#### **Ethanol (CAS nr. 64-17-5)**

Acute oral toxicity (LD50): ca 7.060 mg/kg (rat)

Acute inhalation toxicity (LC50): 95.6 mg/l (rat), 4 h

**Skin corrosion / irritation:** Not classified as skin corrosive/irritant.

**Serious eye damage / eye irritation:** Causes serious eye irritation.

**Respiratory or skin sensitisation:** Not classified as a respiratory sensitiser or skin sensitiser.

**Carcinogenicity, Germ cell mutagenicity or Reproductive toxicity:** Not classified as mutagenic, carcinogenic, or toxic to reproduction.

**STOT – single exposure:** Not classified.

**STOT – repeated exposure:** Not classified.

**Aspiration hazard:** Not classified as a respiratory hazardous agent.

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

**Ingestion:** Nausea, vomiting, abdominal pain. Prolonged or repeated ingestion may damage the liver.

**Eye contact:** Causes serious eye irritation.

**Inhalation:** Dizziness, intoxication, narcosis, difficulty breathing.

**Skin contact:** Repeated or prolonged exposure may cause skin irritation and dermatitis depending on diminishing properties of product.

#### Other information

No data available.

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## 12. ECOLOGICAL INFORMATION

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### 12.1 Toxicity

#### Aquatic toxicity (Acute)

**Quaternary ammonium compounds (CAS no. 68391-01-5)**

Toxicity to fish: LC50 = 0.28 mg/l, exposure time 96 h, Pimephales promelas (OECD Test Guideline 203)

Toxicity to Daphnia magnale: EC50 = 0.016mg/l mg/l, exposure time 48 hours (OECD Test Guideline 202)

Toxicity to algae: EC50 – 0.049 mg/l, Pseudokirchneriella subcapitata, exposure time 72h (OECD Test Guideline 201)

M-factor (Acute aquatic toxicity): 10

#### Ethanol (CAS no. 64-17-5)

Toxicity to Daphnia magnale: EC50 >9.000 mg/l, exposure time 48h

Toxicity to fish: LC50 = 8.14 mg/l, exposure time 96 h, Leuciscus idus

Toxicity (*Pseudomonas putida*): EC5: 6500 mg/l, exposure time 16h.

#### **Aquatic toxicity (Chronic)**

##### Quaternary ammonium compounds (CAS no. 68391-01-5)

Toxicity to fish (chronic): NOEC - 0.032 mg/l, exposure time 34 d, Leuciscus idus (Golden orfe)

Toxicity to Daphnia magnale (chronic): NOEC - 0.0042 mg/l, exposure time 21 d

M-factor (Acute aquatic toxicity): 1

#### **12.2 Persistence and degradability**

Biodegradability: CAS no.: 68424-85-1

> 90% - OECD Test guide 303A

> 99% - OECD Test guide 302A

CO2 emission test: 95.9% - rapidly biodegradable – 28 days – OECD Test guide 301B

Biodegradability: CAS no.: 64-17-5

Degradation rate - 94% (biotic / abiotic process, 1 d)

Theoretical oxygen demand: 2.084 mg / mg

Theoretical carbon dioxide: 1.911 mg / mg.

#### **12.3 Bioaccumulative potential**

The product does not bio-accumulate.

#### **12.4 Mobility in soil**

No data available.

#### **Additional ecological information**

No data available.



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**12.5 Results of PBT and vPvB assessment**

PBT: not applicable.

vPvB: not applicable.

**12.6 Other adverse effects**

No further data available.

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**13. DISPOSAL CONSIDERATIONS**

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**13.1 Waste treatment methods**

Do not empty into drains. Do not allow chemical or used uncleaned packaging to get into watercourses, waterways or ditches.

Dispose of in accordance with the Directive 2008/98 / EC and the local regulations.

Large quantities are absorbed with absorbent material and transported to the disposal site. Rinse small amounts with plenty of water. Follow local regulations.

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**14. TRANSPORT INFORMATION**

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**14.1. UN number**

**14.2. UN proper shipping name:** Flammable (ethanol)

**14.3. Transport hazard class(es):** Class 3(flammable liquids)

**14.4. Packing group:** II

**14.5. Environmental hazards:** Dangerous for the environment (Quaternary ammonium compounds)

**14.6. Special precautions for user:** Provisions on dangerous goods (ADR) should follow the assumptions.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**  
Not relevant.

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**15. REGULATORY INFORMATION**

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

EU legislation.

National legislation.

**15.2 Chemical safety assessment**

No chemical safety assessment has been carried out by the supplier.

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**16. OTHER INFORMATION**

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**List of relevant H-phrases of the mixture (Section 3).**

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

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Version: 1.0

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H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

### **Further information**

The information provided in this Safety Data Sheet is based on the current state of knowledge at the time of publication.

The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type.