

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

#### 1.1. Product identifier

Trade name : Smartzid  
Article number : REF 203450, REF 203453, REF 203455, REF 203457, REF 203449, REF 203452, REF 203454, REF 203456

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Medical device  
Germicide  
Cleaning agent

##### 1.2.2. Uses advised against

No additional information available

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

##### Supplier

Alfred Becht GmbH  
Carl-Zeiss-Str. 16  
P.O. Box 1145  
77656 Offenburg  
T +49 781 60586-0 - F +49 781 60586-40

##### Email competent person

sds@kft.de

#### 1.4. Emergency telephone number

Emergency number : National Poison Information Service (NPIS)  
24 hour national number professionals only  
0844 892 0111  
  
National Health Service (NHS)  
24 hour national number consumer  
England and Scotland: 111  
Wales: 0845 46 47  
Northern Ireland: call your local General Practitioner  
  
Call 999 if there is a life-threatening incident.

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2 H225  
Serious eye damage/eye irritation, Category 1 H318  
Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Causes serious eye damage.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



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	GHS02	GHS05
Signal word (CLP)	: Danger	
Contains	: n-propanol	
Hazard statements (CLP)	: H225 - Highly flammable liquid and vapour. H318 - Causes serious eye damage.	
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames. No smoking. P280 - Wear eye 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. P310 - Immediately call a POISON CENTER, a doctor.	

### 2.3. Other hazards

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

Component	
ethanol (64-17-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
n-propanol (71-23-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
butanone (78-93-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
didecyldimethylammonium chloride (7173-51-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Comments : Cleaning agent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethanol substance with national workplace exposure limit(s) (GB)	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5	≥ 25 – < 50	Flam. Liq. 2, H225 Eye Irrit. 2, H319
n-propanol substance with national workplace exposure limit(s) (GB)	CAS-No.: 71-23-8 EC-No.: 200-746-9 EC Index-No.: 603-003-00-0	≥ 5 – < 10	Flam. Liq. 2, H225 Eye Dam. 1, H318 STOT SE 3, H336
butanone substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 78-93-3 EC-No.: 201-159-0 EC Index-No.: 606-002-00-3	≥ 0.25 – < 1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
didecyldimethylammonium chloride	CAS-No.: 7173-51-5 EC-No.: 230-525-2 EC Index-No.: 612-131-00-6	< 0.1	Acute Tox. 3 (Oral), H301 (ATE=264 mg/kg bodyweight) Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
ethanol	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5	( 50 ≤C < 100) Eye Irrit. 2, H319

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: When in doubt or if symptoms are observed, get medical advice.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after eye contact	: Serious damage to eyes.
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### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Strong water jet.

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

Fire hazard	: Highly flammable liquid and vapour.
Explosion hazard	: Explosive vapour/air mixtures may be formed.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide.

### 5.3. Advice for firefighters

Firefighting instructions	: Protect container with water spray.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray. Disposal must be done according to official regulations.

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### SECTION 6: Accidental release measures

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

General measures : Remove all sources of ignition. Avoid contact with skin and eyes. Ensure adequate air ventilation. Do not breathe gas/vapour/aerosol.

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Avoid sub-soil penetration.

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

Methods for cleaning up : Cover spill with non combustible material, e.g.: sand/earth. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

Other information : Dispose of materials or solid residues at an authorized site. Disposal must be done according to official regulations.

#### 6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : In use, may form flammable vapour-air mixture.  
Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use only non-sparking tools. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures : Immediately remove contaminated or damp clothing. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Technical measures : Ground/bond container and receiving equipment.  
Storage conditions : Protect against frost. Store in a well-ventilated place. Keep cool. Keep container tightly closed.  
Heat and ignition sources : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from heat and direct sunlight.  
Information about storage in one common storage facility : Keep away from food, drink and animal feeding stuffs. Store away from Acids, oxidizing materials.

#### 7.3. Specific end use(s)

Follow the directions!.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

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<b>n-propanol (71-23-8)</b>	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Propan-1-ol
WEL TWA (OEL TWA) [1]	500 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	200 ppm
WEL STEL (OEL STEL)	625 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	250 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>butanone (78-93-3)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Butanone
IOEL TWA	600 mg/m <sup>3</sup>
IOEL TWA [ppm]	200 ppm
IOEL STEL	900 mg/m <sup>3</sup>
IOEL STEL [ppm]	300 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Butan-2-one (methyl ethyl ketone)
WEL TWA (OEL TWA) [1]	600 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	200 ppm
WEL STEL (OEL STEL)	899 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	300 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>United Kingdom - Biological limit values</b>	
Local name	Butan-2-one (methyl ethyl ketone)
BMGV	70 µmol/l Parameter: butan-2-one - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>ethanol (64-17-5)</b>	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Ethanol
WEL TWA (OEL TWA) [1]	1920 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	1000 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

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### 8.1.4. DNEL and PNEC

<b>n-propanol (71-23-8)</b>	
<b>DNEL/DMEL (Workers)</b>	
Acute - systemic effects, inhalation	1723 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	136 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	268 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Acute - systemic effects, inhalation	1036 mg/m <sup>3</sup>
Long-term - systemic effects, oral	61 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	80 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	81 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	6.83 mg/l
PNEC aqua (marine water)	0.683 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	27.5 mg/kg dwt
PNEC sediment (marine water)	2.75 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	1.49 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	96 mg/l
<b>butanone (78-93-3)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	1161 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	600 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	31 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	106 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	412 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	55.8 mg/l
PNEC aqua (marine water)	55.8 mg/l
PNEC aqua (intermittent, freshwater)	55.8 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	284.74 mg/kg dwt
PNEC sediment (marine water)	284.7 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	22.5 mg/kg dwt
<b>PNEC (Oral)</b>	
PNEC oral (secondary poisoning)	1000 kg/kg food

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<b>butanone (78-93-3)</b>	
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	709 mg/l
<b>ethanol (64-17-5)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	343 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	950 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	87 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	114 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	206 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.96 mg/l
PNEC aqua (marine water)	0.79 mg/l
PNEC aqua (intermittent, freshwater)	2.75 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	3.6 mg/kg dwt
PNEC sediment (marine water)	2.9 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0.63 mg/kg dwt
<b>PNEC (Oral)</b>	
PNEC oral (secondary poisoning)	0.38 kg/kg food
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	580 mg/l
<b>didecyldimethylammonium chloride (7173-51-5)</b>	
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.0011 mg/l
PNEC aqua (marine water)	0.00011 mg/l
PNEC aqua (intermittent, freshwater)	0.00021 mg/l
PNEC aqua (intermittent, marine water)	0.000021 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	61.86 mg/kg dwt
PNEC sediment (marine water)	6.186 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	1.4 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	0.14 mg/l

### 8.1.5. Control banding

No additional information available

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### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

#### 8.2.2. Personal protection equipment

##### 8.2.2.1. Eye and face protection

##### Eye protection:

Wear closed safety glasses. EN 166. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure

##### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing. EN 13034. EN ISO 13688

##### Hand protection:

In case of repeated or prolonged contact wear gloves. Chemically resistant protective gloves. Butyl rubber. Neoprene. Polyethylene. EN 374. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

##### 8.2.2.3. Respiratory protection

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. EN 143. Short term exposure. Breathing apparatus with filter. A-P2. . Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust

##### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

##### Environmental exposure controls:

Avoid release to the environment.

##### Other information:

Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Always wash hands after handling the product. Apply emollient cream.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: colourless.
Odour	: alcohol odour.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability (solid, gas)	: Not applicable
Explosive properties	: Product is not explosive. Explosive vapour/air mixtures may be formed.
Oxidising properties	: Non oxidizing.
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: < 10
Viscosity, kinematic	: Not available
Solubility	: Water: Miscible (Solution)
Partition coefficient n-octanol/water (Log Kow)	: Not available



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Partition coefficient n-octanol/water (Log Pow)	: Not applicable
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: 0.91 g/cm <sup>3</sup> (Solution)
Relative density	: Not available
Relative vapour density at 20 °C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Highly flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Explosive vapour/air mixtures may be formed.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

#### didecyldimethylammonium chloride (7173-51-5)

LD50 oral rat	264 mg/kg bodyweight (female; (OECD 401 method))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: < 10
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Serious eye damage/irritation	: Causes serious eye damage. pH: < 10
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)

### n-propanol (71-23-8)

STOT-single exposure	May cause drowsiness or dizziness.
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### butanone (78-93-3)

STOT-single exposure	May cause drowsiness or dizziness.
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STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

## 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

### didecyldimethylammonium chloride (7173-51-5)

LC50 - Fish [1]	0.49 mg/l (96 h; Brachydanio rerio (zebra-fish); (OECD 203 method))
EC50 - Crustacea [1]	≈ 0.057 mg/l (48 h; Daphnia magna; (OECD 202 method))
EC50 72h algae	≈ 0.062 mg/l (72h; Pseudokirchneriella subcapitata; (OECD 201 method))
ErC50 algae	0.062 mg/l (72 h; Pseudokirchnerella subcapitata (OECD 201 method))
NOEC chronic crustacea	0.021 mg/l (21 d; Daphnia magna; (OECD 211 method))
NOEC chronic algae	0.013 mg/l (OECD 201 method)

### 12.2. Persistence and degradability

#### Smartzid

Persistence and degradability	The product has not been tested.
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#### n-propanol (71-23-8)

Persistence and degradability	Readily biodegradable.
Biodegradation	75 % (20 d)

#### butanone (78-93-3)

Persistence and degradability	Readily biodegradable.
Biodegradation	98 % (28 d; (OECD 301D method))

#### ethanol (64-17-5)

Persistence and degradability	Readily biodegradable.
Biodegradation	84 % (20 d)

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<b>didecyldimethylammonium chloride (7173-51-5)</b>	
Persistence and degradability	Readily biodegradable.
Biodegradation	69 % (28d)

### 12.3. Bioaccumulative potential

<b>Smartzid</b>	
Partition coefficient n-octanol/water (Log Pow)	Not applicable
Bioaccumulative potential	The product has not been tested.

<b>n-propanol (71-23-8)</b>	
Partition coefficient n-octanol/water (Log Pow)	0.2 (25 °C; pH 7; (OECD 117 method))

<b>butanone (78-93-3)</b>	
Partition coefficient n-octanol/water (Log Pow)	0.3 (40 °C; pH 7; (OECD 117 method))
Bioaccumulative potential	Bioaccumulation unlikely.

<b>ethanol (64-17-5)</b>	
Partition coefficient n-octanol/water (Log Kow)	-0.35 (20 °C)
Bioaccumulative potential	Bioaccumulation unlikely.

<b>didecyldimethylammonium chloride (7173-51-5)</b>	
Partition coefficient n-octanol/water (Log Pow)	2.59 (20 °C; (OECD 105 method))

### 12.4. Mobility in soil

<b>Smartzid</b>	
Ecology - soil	The product has not been tested.

<b>n-propanol (71-23-8)</b>	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.633 (Quantitative structure-activity relationship (QSAR))

<b>ethanol (64-17-5)</b>	
Surface tension	22.31 mN/m (20 °C)

<b>didecyldimethylammonium chloride (7173-51-5)</b>	
Surface tension	25.82 mN/m (OECD 115 method)

### 12.5. Results of PBT and vPvB assessment

<b>Smartzid</b>	
PBT: not relevant – no registration required	
vPvB: not relevant – no registration required	

<b>Component</b>	
ethanol (64-17-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
n-propanol (71-23-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
butanone (78-93-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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### Component

didecyldimethylammonium chloride (7173-51-5)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII  
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods	: European waste catalogue. Disposal must be done according to official regulations.
Sewage disposal recommendations	: Do not allow into drains or water courses.
Product/Packaging disposal recommendations	: Do not dispose of with domestic waste.
Additional information	: Flammable vapours may accumulate in the container.
European List of Waste (LoW) code	: 07 01 01* - aqueous washing liquids and mother liquors
HP Code	: HP3 - "Flammable:" — flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; — flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; — flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; — flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; — water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; — other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP4 - "Irritant — skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

## SECTION 14: Transport information






In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1993	UN 1993	UN 1993	UN 1993	UN 1993
<b>14.2. UN proper shipping name</b>				
FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-1-ol)	FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-2-ol)	Flammable liquid, n.o.s. (ethanol ; propan-2-ol)	FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-2-ol)	FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-2-ol)
<b>Transport document description</b>				
UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-1-ol), 3, II, (D/E)	UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-2-ol), 3, II	UN 1993 Flammable liquid, n.o.s. (ethanol ; propan-2-ol), 3, II	UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-2-ol), 3, II	UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-2-ol), 3, II
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3

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ADR	IMDG	IATA	ADN	RID
				
<b>14.4. Packing group</b>				
II	II	II	II	II
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) : F1  
Special provisions (ADR) : 274, 601, 640C  
Limited quantities (ADR) : 1I  
Excepted quantities (ADR) : E2  
Transport category (ADR) : 2  
Hazard identification number (Kemler No.) : 33  
Orange plates :



Tunnel restriction code (ADR) : D/E  
EAC code : •3YE

#### Transport by sea

Special provisions (IMDG) : 274  
Limited quantities (IMDG) : 1 L  
Excepted quantities (IMDG) : E2  
EmS-No. (Fire) : F-E  
EmS-No. (Spillage) : S-E

#### Air transport

PCA Excepted quantities (IATA) : E2  
PCA Limited quantities (IATA) : Y341  
PCA limited quantity max net quantity (IATA) : 1L  
PCA packing instructions (IATA) : 353  
PCA max net quantity (IATA) : 5L  
CAO max net quantity (IATA) : 60L  
Special provisions (IATA) : A3

#### Inland waterway transport

Classification code (ADN) : F1  
Special provisions (ADN) : 274, 601, 640C  
Limited quantities (ADN) : 1 L  
Excepted quantities (ADN) : E2  
Carriage permitted (ADN) : T  
Additional requirements/Remarks (ADN) :

#### Rail transport

Classification code (RID) : F1  
Special provisions (RID) : 274, 601, 640C  
Limited quantities (RID) : 1L

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Excepted quantities (RID) : E2  
Transport category (RID) : 2  
Hazard identification number (RID) : 33

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

##### EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(a)	Smartzid ; butanone ; ethanol ; n-propanol
3(b)	Smartzid ; butanone ; ethanol ; n-propanol
40.	Smartzid ; butanone ; ethanol ; n-propanol

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Other information, restriction and prohibition regulations : Take note of Directive 94/33/EC on the protection of young people at work.

#### Directive 2012/18/EU (SEVESO III)

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
P5c FLAMMABLE LIQUIDS Flammable liquids, Categories 2 or 3 not covered by P5a and P5b	5000	50000

#### 15.1.2. National regulations

##### United Kingdom

National regulations : This safety data sheet is for informational purposes only and does not comply with national legal requirements without reference to a national distributor. The national distributor is responsible for a legally compliant safety data sheet.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration

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Abbreviations and acronyms:	
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
ATE	Acute Toxicity Estimate
DNEL	Derived-No Effect Level
DMEL	Derived Minimal Effect level
IARC	International Agency for Research on Cancer
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PNEC	Predicted No-Effect Concentration
STP	Sewage treatment plant
TLM	Median Tolerance Limit

Data sources : Information provided by the manufacturer. MSDSs of the suppliers. ECHA (European Chemicals Agency).

Department issuing data specification sheet: : KFT Chemieservice GmbH  
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Phone: +49 6155-8981-400  
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Contact person : Maximilian Gatterdam

Full text of H- and EUH-statements:	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.

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### Full text of H- and EUH-statements:

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Flam. Liq. 2	H225	Calculation method
Eye Dam. 1	H318	Calculation method

KFT SDS EU 01

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.