Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

: SPITACID Product name

Product code : 117468E

Use of the : Hand Sanitizer

Substance/Mixture

Substance type: : Mixture

For professional users only.

Product dilution information : No dilution information provided.

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

Identified uses : Drug

Recommended restrictions

on use

: Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

: Ecolab Deutschland GmbH Company

Ecolab-Allee 1

40789 Monheim am Rhein, Germany +49 (0)2173 599 0

OfficeService.DEDUS@ecolab.com

1.4 Emergency telephone number

Emergency telephone : +4932221096286

number +32-(0)3-575-5555 Trans-European

Poison Information Centre : +49 (0)551 38318854

telephone number

Date of Compilation/Revision : 01.02.2019 Version : 1.0

Section: 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2 H225

According to the current legislation creation of Safety Data Sheets is not mandatory for medicinal products or cosmetics

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms



Signal Word : Danger

Hazard Statements : H225 Highly flammable liquid and vapour.

Precautionary Statements : **Prevention:**

P210 Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No

smoking.

2.3 Other hazards

None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification REGULATION (EC) No 1272/2008	Concentration: [%]
ethanol	64-17-5 200-578-6 01-2119457610-43	Flammable liquids Category 2; H225	>= 40 - < 50
Isopropyl Alcohol	67-63-0 200-661-7 01-2119457558-25	Flammable liquids Category 2; H225 Eye irritation Category 2; H319 Specific target organ toxicity - single exposure Category 3; H336	>= 25 - < 30
Substances with a workp	lace exposure limit:		
Benzyl alcohol	100-51-6 202-859-9 01-2119492630-38	Acute toxicity Category 4; H302 Acute toxicity Category 4; H332	>= 0.5 - < 1
butanone	78-93-3 201-159-0 01-2119457290-43	Flammable liquids Category 2; H225 Eye irritation Category 2; H319 Specific target organ toxicity - single exposure Category 3; H336	>= 0.25 - < 0.5

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

Section: 4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of eye contact : Rinse with water.

In case of skin contact : Rinse with water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

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4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

Section: 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: Fire Hazard

Keep away from heat and sources of ignition. Flash back possible over considerable distance.

Beware of vapours accumulating to form explosive concentrations.

Vapours can accumulate in low areas.

Hazardous combustion

products

: Depending on combustion properties, decomposition products

may include following materials:

Carbon oxides

nitrogen oxides (NOx) Sulphur oxides

Oxides of phosphorus

5.3 Advice for firefighters

for firefighters

Special protective equipment : Use personal protective equipment.

Further information : Use water spray to cool unopened containers. Fire residues and

contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or

explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency

personnel

: Remove all sources of ignition. Refer to protective measures listed

in sections 7 and 8.

Advice for emergency

responders

: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable

materials.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.

6.3 Methods and materials for containment and cleaning up

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Methods for cleaning up : Eliminate all ignition sources if safe to do so. Stop leak if safe to

do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain

material to ensure runoff does not reach a waterway.

6.4 Reference to other sections

See Section 1 for emergency contact information.

For personal protection see section 8.

See Section 13 for additional waste treatment information.

Section: 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : Keep away from fire, sparks and heated surfaces. Take necessary

action to avoid static electricity discharge (which might cause ignition of organic vapours). Open drum carefully as content may

be under pressure.

Hygiene measures : No specific measures identified.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

: Keep away from heat and sources of ignition. Keep in a cool, well-ventilated place. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable

labeled containers.

Storage temperature : 0 °C to 25 °C

7.3 Specific end uses

Specific use(s) : Drug

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.		Value type (Form of exposure)	Control parameters	Basis	
ethanol	64-17-5		AGW	500 ppm 960 mg/m3	TRGS 900	
Further information	DFG	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				
	Υ		n there is compliance with the OEL and biological tolerance values, there risk of harming the unborn child			
Isopropyl Alcohol	67-63-0		AGW	200 ppm 500 mg/m3	TRGS 900	
Further information	DFG	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				
	Y	When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				

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Benzyl alcohol	100-51-6		AGW (Vapour and aerosols)	5 ppm 22 mg/m3	TRGS 900	
Further information	DFG		enate commission for the review of compounds at the work place dangerous the health (MAK-commission).			
	11	Sum of vapor and aerosols.				
	Н	Skin absorption				
	Υ	When there is compliance with the OEL and biological tolerance values, the				
		is no risk of harming the unborn child				
butanone	78-93-3		AGW	200 ppm 600 mg/m3	TRGS 900	
Further information	DFG	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				
	EU	European Union (The EU has established a limit value: deviations in value and peak limit are possible)				
	Н	Skin absorption				
	Y	When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				

DNEL

Isopropyl Alcohol	:	End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 888 mg/cm2 End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 500 mg/m3
		End Use: Consumers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 319 mg/cm2
		End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 89 mg/m3
		End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects Value: 26 ppm

PNEC

INLO		
Isopropyl Alcohol	:	Fresh water
		Value: 140.9 mg/l
		Marine water
		Value: 140.9 mg/l
		Intermittent use/release
		Value: 140.9 mg/l
		Fresh water
		Value: 552 mg/kg
		Marine sediment

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Value: 552 mg/kg

Soil

Value: 28 mg/kg

Sewage treatment plant Value: 2251 mg/l

Oral

Value: 160 mg/kg

8.2 Exposure controls

Appropriate engineering controls

Engineering measures : Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

Individual protection measures

Hygiene measures : No specific measures identified.

Eye/face protection (EN 166) : No special protective equipment required.

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection

(EN 14605)

: No special protective equipment required.

Respiratory protection (EN

143, 14387)

: None required if airborne concentrations are maintained below the

exposure limit listed in Exposure Limit Information. Use certified

respiratory protection equipment meeting EU

requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods

or procedures of work organization.

Environmental exposure controls

General advice : Consider the provision of containment around storage vessels.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : alcohol-like

pH : 6.5, 100 %

Flash point : 21 °C closed cup

Odour Threshold : Not applicable and/or not determined for the mixture Melting point/freezing point : Not applicable and/or not determined for the mixture

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Initial boiling point and

boiling range

: Not applicable and/or not determined for the mixture

Evaporation rate : Not applicable and/or not determined for the mixture

Flammability (solid, gas) : Not applicable and/or not determined for the mixture

Upper explosion limit : Not applicable and/or not determined for the mixture

Lower explosion limit : Not applicable and/or not determined for the mixture

Vapour pressure : Not applicable and/or not determined for the mixture

Relative vapour density : Not applicable and/or not determined for the mixture

Relative density : 0.87

Water solubility : soluble

Solubility in other solvents : Not applicable and/or not determined for the mixture

Partition coefficient: n-

octanol/water

: Not applicable and/or not determined for the mixture

Auto-ignition temperature
Thermal decomposition

Not applicable and/or not determined for the mixtureNot applicable and/or not determined for the mixture

Viscosity, kinematic

: Not applicable and/or not determined for the mixture

Explosive properties
Oxidizing properties

Not applicable and/or not determined for the mixtureThe substance or mixture is not classified as oxidizing.

9.2 Other information

Not applicable and/or not determined for the mixture

Section: 10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Depending on combustion properties, decomposition products may include following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides

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Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

exposure

Information on likely routes of : Inhalation, Eye contact, Skin contact

Product

Acute oral toxicity : There is no data available for this product.

Acute inhalation toxicity : There is no data available for this product.

Acute dermal toxicity : There is no data available for this product.

Skin corrosion/irritation : There is no data available for this product.

Serious eye damage/eye

irritation

: There is no data available for this product.

Respiratory or skin

sensitization

: There is no data available for this product.

Carcinogenicity : There is no data available for this product.

Reproductive effects : There is no data available for this product.

Germ cell mutagenicity : There is no data available for this product.

Teratogenicity : There is no data available for this product.

STOT - single exposure : There is no data available for this product.

STOT - repeated exposure : There is no data available for this product.

Aspiration toxicity : There is no data available for this product.

Components

Acute oral toxicity : ethanol

LD50 rat: 10,470 mg/kg

Isopropyl Alcohol LD50 rat: 5,840 mg/kg

Benzyl alcohol

LD50 rat: 1,620 mg/kg

butanone

LC50 rat: 2,193 mg/kg

Test substance: Information given is based on data obtained from

similar substances.

Components

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Acute inhalation toxicity : ethanol

4 h LC50 rat: 117 mg/l Test atmosphere: vapour

Isopropyl Alcohol 4 h LC50 rat: > 30 mg/l Test atmosphere: vapour

Benzyl alcohol

4 h LC50 rat: 4.178 mg/l Test atmosphere: dust/mist

butanone

4 h LC50 rat: 34.4 mg/l Test atmosphere: vapour

Components

Acute dermal toxicity : ethanol

LD50 rabbit: > 15,800 mg/kg

Isopropyl Alcohol

LD50 rabbit: 12,870 mg/kg

Benzyl alcohol

LD50 rabbit: 2,000 mg/kg

butanone

LD50 rat: > 8,050 mg/kg

Potential Health Effects

Eyes : Health injuries are not known or expected under normal use.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Section: 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

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Product

Toxicity to fish : no data available Toxicity to daphnia and other : no data available

aquatic invertebrates

Toxicity to algae : no data available

Components

Toxicity to fish : ethanol

96 h LC50 Pimephales promelas (fathead minnow): > 100 mg/l

Isopropyl Alcohol

96 h LC50 Pimephales promelas (fathead minnow): 9,640 mg/l

Benzyl alcohol

96 h LC50 Fish: > 100 mg/l

butanone

96 h LC50 Pimephales promelas (fathead minnow): 2,993 mg/l

Components

Toxicity to daphnia and other : Isopropyl Alcohol

aquatic invertebrates

LC50 Daphnia magna (Water flea): > 10,000 mg/l

butanone

48 h EC50 Daphnia magna (Water flea): 308 mg/l

Components

Toxicity to algae : butanone

96 h EC50 Pseudokirchneriella subcapitata (algae): 2,029 mg/l

12.2 Persistence and degradability

Product

no data available

Components

Biodegradability : ethanol

Result: Readily biodegradable.

Isopropyl Alcohol

Result: Readily biodegradable.

Benzyl alcohol

Result: Readily biodegradable.

butanone

Result: Readily biodegradable.

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

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12.5 Results of PBT and vPvB assessment

Product

Assessment : This substance/mixture contains no components considered to be

either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or

higher.

12.6 Other adverse effects

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

13.1 Waste treatment methods

Product : Where possible recycling is preferred to disposal or incineration. If

recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal

facility.

Contaminated packaging : Dispose of as unused product. Empty containers should be taken

to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local,

state, and federal regulations.

Guidance for Waste Code

selection

: Organic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the

toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC)

and local regulations.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (ADR/ADN/RID)

14.1 UN number : 1987

14.2 UN proper shipping : ALCOHOLS, N.O.S.

name

(Ethanol, Isopropanol)

14.3 Transport hazard :

class(es)

: 3

14.4 Packing group : II14.5 Environmental hazards : No14.6 Special precautions for : None

user

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Air transport (IATA)

14.1 UN number : 1987

14.2 UN proper shipping : Alcohols, n.o.s.

name

(Ethanol, Isopropanol)

14.3 Transport hazard : 3

class(es)

14.4 Packing group : II14.5 Environmental hazards : No14.6 Special precautions for : None

user

Sea transport (IMDG/IMO)

14.1 UN number : 1987

14.2 UN proper shipping : ALCOHOLS, N.O.S.

name

(Ethanol, Isopropanol)

14.3 Transport hazard : 3

class(es)

14.4 Packing group14.5 Environmental hazards14.6 Special precautions forNoNo

user

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC

Code

: Not applicable.

Section: 15. REGULATORY INFORMATION

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

National Regulations

Take note of Dir 94/33/EC on the protection of young people at work.

Hazard class for water : WGK 2

Classification according to AwSV, Annex 1

German storage class : 3

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out on the product.

Section: 16. OTHER INFORMATION

Procedure used to derive the classification according to REGULATION (EC) No 1272/2008

Classification	Justification
Flammable liquids 2, H225	Based on product data or assessment

Full text of H-Statements

H225	Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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H336

May cause drowsiness or dizziness.

Full text of other abbreviations

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; AICS - Australian Inventory of Chemical Substances; ASTM -American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL -Domestic Substances List (Canada); ECHA – European Chemicals Agency; EC-Number – European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx – Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC -International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 – Lethal Concentration to 50 % of a test population; LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC No Observed (Adverse) Effect Concentration; NO(A)EL – No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR – (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT – Self-Accelerating Decomposition Temperature; SDS – Safety Data Sheet; TCSI – Taiwan Chemical Substance Inventory; TRGS – Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB -Very Persistent and Very Bioaccumulative

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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