

SAFETY DATA SHEET

Sjúkrahússpritt

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	31.03.2014
Revision date	20.04.2021

1.1. Product identifier

Product name	Sjúkrahússpritt
Article no.	1472032

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

Use of the substance / mixture	Disinfectant.
Relevant identified uses	PC8 Biocidal Products (e.g. Disinfectants, pest control)
The chemical can be used by the general public	Yes
The chemical is used by general public only	No

1.3. Details of the supplier of the safety data sheet

Company name	Tandur h.f.
Office address	Hestháis 12
Postcode	110
City	Reykjavík
Country	ICELAND
Telephone number	00354 510 1200
Email	tandur@tandur.is
Website	www.tandur.is

1.4. Emergency telephone number

Emergency telephone	Telephone number: (+354)-543-2222 Description: POISON CENTER EMERGENCY#
	Telephone number: 112 Description: POISON CENTER EMERGENCY#

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 2; H225 Eye Irrit. 2; H319
--	--

2.2. Label elements

Hazard pictograms (CLP)



Signal word	Danger
Hazard statements	H226 Flammable liquid and vapour. H319 Causes serious eye irritation.
Precautionary statements	P210 Keep away from heat / sparks / open flames / hot surfaces. – No smoking. P233 Keep container tightly closed. P243 Take action to prevent static discharge. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P370 + P378 In case of fire: Use water mist, dry chemical, foam or carbon dioxide to extinguish. P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

PBT / vPvB	This product does not contain any PBT or vPvB substances.
------------	---

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Ethanol	CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5 REACH Reg. No.: 01-211945761	Flam. Liq. 2; H225 Eye Irrit. 2; H319	65 - 70 % vol/vol	
Propan-2-ol	CAS No.: 67-63-0 EC No.: 200-661-7 Index No.: 603-117-00-0	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	5 % vol/vol	

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Call a POISON CENTER or doctor/physician if you feel unwell. Show this SDS.
Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

Skin contact	Flush skin thoroughly with water. If skin irritation occurs: Get medical advice/attention.
Eye contact	Promptly wash eyes with plenty of water while lifting the eye lids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately! Continue flushing during transport to hospital.
Ingestion	Rinse mouth thoroughly. Do not induce vomiting. Get immediate medical advice/attention.
Recommended personal protective equipment for first aid responders	See section 8.2

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

Acute symptoms and effects	Irritation of eyes and mucous membranes, dilated pupils, respiratory irritation, breathing problems. Nausea/vomiting, depression, sleepiness, dizziness. See further section 11.1 under "Potential Acute Effects"
----------------------------	---

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Water mist, foam, dry powder or carbon dioxide.
------------------------------	---

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Flammable liquid and vapour.
Hazardous combustion products	Not known.

5.3. Advice for firefighters

Personal protective equipment	Wear respiratory protection. Wear protective gloves / protective clothing / eye protection / face protection.
Fire fighting procedures	Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Stop leak if safe to do so.
Personal protection measures	Wear protective clothing as described in Section 8 of this safety data sheet. Do not breathe vapour. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Provide adequate ventilation.
For emergency responders	Wear protective clothing as described in Section 8 of this safety data sheet. In case of inadequate ventilation wear respiratory protection. Call a POISON CENTER or doctor/physician if you feel unwell.

6.2. Environmental precautions

Environmental precautionary measures	Avoid release to the environment. Collect and dispose of spillage as indicated in section 13.
--------------------------------------	---

6.3. Methods and material for containment and cleaning up

Containment	Store in a closed container.
-------------	------------------------------

6.4. Reference to other sections

Other instructions	See section 8 and 13 for further details.
--------------------	---

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Provide easy access to water supply and eye wash facilities. Avoid inhalation of vapours. Avoid smoking and use of open fire. Avoid sparks. Use spark-proof equipment and avoid contact with metal. Can become highly flammable in use. Eliminate all sources of ignition.
----------	--

Protective safety measures

Preventitive measures to protect the environment	Prevent the product to reach sewage water or drainage system undiluted. Collect spillage if possible.
Advice on general occupational hygiene	Private clothes and working clothes should be kept separately.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Keep away from food, drink and animal feeding stuffs. Keep container tightly closed. Keep in original container. Protect from heat and direct sunlight. Store in a cool place.
---------	--

Conditions for safe storage

Requirements for storage rooms and vessels	Keep only in original container.
--	----------------------------------

7.3. Specific end use(s)

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Ethanol	CAS No.: 64-17-5	Limit value (8 h) : 1000 ppm Limit value (8 h) : 1920 mg/m ³	TWA Year: 2011
Propan-2-ol	CAS No.: 67-63-0	Limit value (8 h) : 400 ppm Limit value (8 h) : 999 mg/m ³ Limit value (short term) Value: 500 ppm Limit value (short term)	TWA Year: 2011

Value: 1250 mg/m³**DNEL / PNEC**

Substance	Ethanol
DNEL	<p>Group: Worker</p> <p>Route of exposure: Long term (repeated) - Inhalation - Systemic effect</p> <p>Value: 950 mg/m³</p> <p>Group: Worker</p> <p>Route of exposure: Long term (repeated) - Dermal - Systemic effect</p> <p>Value: 343 mg/kg bw/day</p>
PNEC	<p>Route of exposure: Water</p> <p>Value: 0,79 mg/l</p> <p>Reference: Marine water</p> <p>Route of exposure: Sewage treatment plant STP</p> <p>Value: 580 mg/l</p> <p>Route of exposure: Water</p> <p>Value: 0,96 mg/l</p> <p>Reference: Fresh water</p>
Substance	Propan-2-ol
PNEC	<p>Route of exposure: Water</p> <p>Value: 140,9 mg/l</p> <p>Reference: Marine water</p> <p>Route of exposure: Sewage treatment plant STP</p> <p>Value: 2251 mg/l</p> <p>Route of exposure: Sediment</p> <p>Value: 552 mg/kg</p> <p>Route of exposure: Soil</p> <p>Value: 28 mg/kg</p> <p>Route of exposure: Water</p> <p>Value: 140,9 mg/l</p> <p>Reference: Freshwater</p>

8.2. Exposure controls

Limitation of exposure on workplace

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Protective gloves and goggles are recommended. An eye wash bottle must be available at the work site.

Safety signs**Precautionary measures to prevent exposure**

Instruction on measures to prevent exposure	Secure access of workers to safety information.
Organisational measures to prevent exposure	Avoid direct contact and/or splashes where possible. Train personnel.
Technical measures to prevent exposure	Use eye protection (safety glasses or face shield) and protective gloves.

Eye / face protection

Eye protection	Use approved safety glasses, goggles or face shield. Safety glasses should have side shields.
Suitable eye protection	Safety glasses should have side shields.
Additional eye protection measures	Provide easy access to water supply and eye wash facilities.
Reference to relevant standard	EN 166

Hand protection

Hand protection	Chemical resistant gloves required for prolonged or repeated contact.
Skin- / hand protection, short term contact	Nitril rubber: Penetration time: ≥ 30 min Material thickness: $\geq 0,4$ mm
Skin- / hand protection, long term contact	Butylrubber: Penetration time: ≥ 480 min Material thickness: $\geq 0,7$ mm
Reference to relevant standard	Chemical-resistant protective gloves (EN 374).

Skin protection

Skin protection (except hands)	Wear suitable protective clothing as protection against splashing or contamination.
--------------------------------	---

Respiratory protection

Respiratory protection	Under normal conditions of use respiration protection should not be required. In case of inadequate ventilation use suitable respirator.
------------------------	---

Appropriate environmental exposure control

Environmental exposure controls	Should not reach sewage or drainage system undiluted.
---------------------------------	---

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Clear liquid.
Colour	Colorless.
Odour	Alcohol.
pH	Status: In delivery state Comments: No data recorded.

Melting point / melting range	Comments: Not determined.
Boiling point / boiling range	Comments: Not determined.
Flash point	Value: ~ 13 °C
Vapour density	Comments: Not determined.
Relative density	Value: = 0,89 g/ml Temperature: ~ 20 °C
Solubility in water	Fully miscible.
Viscosity	Comments: Not determined.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Keep away from heat / sparks / open flames / hot surfaces. — No smoking. Store in a well-ventilated place. Keep cool.
------------	---

10.2. Chemical stability

Stability	The mixture is stable under normal storage and use conditions.
-----------	--

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No hazardous reactions known under normal storage and use conditions. Keep away from heat / sparks / open flames / hot surfaces. — No smoking.
------------------------------------	--

10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.
---------------------	---

10.5. Incompatible materials

Materials to avoid	Alkali metals. Strong oxidising substances.
--------------------	---

10.6. Hazardous decomposition products

Hazardous decomposition products	No hazardous decomposition products.
----------------------------------	--------------------------------------

SECTION 11: Toxicological information

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

Substance	Propan-2-ol
Acute toxicity	Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: = 5050 mg/kg Animal test species: Rat

Type of toxicity: Acute
Effect tested: LD50
Route of exposure: Dermal
Value: ~ 12800 mg/kg
Animal test species: Rabbit

Other information regarding health hazards

Inhalation	May cause respiratory irritation. May cause drowsiness or dizziness.
Skin contact	Defats the skin.
Eye contact	Causes serious eye irritation. Immediate first aid is necessary.
Ingestion	Irritating. May be absorbed in the body and cause dizziness, nausea and vomiting. Ingestion of large amounts may cause unconsciousness.
Mutagenicity	Data lacking.
Carcinogenicity, other information	Data lacking.
Reproductive toxicity	Data lacking.

11.2 Other information

SECTION 12: Ecological information

12.1. Toxicity

Substance	Ethanol
Aquatic toxicity, fish	Value: = 14,2 g/L Test duration: 96 h Species: Pimephales promelas Method: US EPA method E03-05
Substance	Propan-2-ol
Aquatic toxicity, fish	Value: ~ 9600 mg/l Test duration: 96 h
Substance	Ethanol
Aquatic toxicity, algae	Value: = 22,6 g/L Test duration: 9 d Species: Nostoc species Method: OECD Guideline 201
Substance	Ethanol
Aquatic toxicity, crustacean	Value: = 5012 mg/l Test duration: 48 h Species: Ceriodaphnia dubia Method: ASTM E729-80
Substance	Propan-2-ol
Aquatic toxicity, crustacean	Value: ~ 1400 mg/l Test duration: 48 h

12.2. Persistence and degradability

Persistence and degradability, comments

No information available on mixture. However, individual substances are all classified as readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

PBT assessment results

Not Classified as PBT/vPvB by current EU criteria.

Substance

Ethanol

PBT assessment results

Not Classified as PBT/vPvB by current EU criteria.

Substance

Propan-2-ol

PBT assessment results

This substance is not classified as PBT or vPvB.

vPvB evaluation results

No data available on mixture. Contains no PBT or vPvB substances. See section 2.3

12.6. Endocrine disrupting properties

12.7. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal

Avoid release to the environment. Dispose of waste and residues in accordance with local authority requirements.

Relevant waste regulation

Regulation no. 737/2003

Hazardous waste product

Avoid release to the environment.

Hazardous waste packing

Avoid release to the environment.

National regulations

Regulation 184/2002

Regulation 786/1999

Other information

Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

ADR/RID/ADN

1170

IMDG

1170

ICAO/IATA

1170

14.2. UN proper shipping name

ADR/RID/ADN	ETHANOL SOLUTION
IMDG	ETHANOL SOLUTION
ICAO/IATA	ETHANOL SOLUTION

14.3. Transport hazard class(es)

ADR/RID/ADN	3
IMDG	3
ICAO/IATA	3

14.4. Packing group

ADR/RID/ADN	II
IMDG	II
ICAO/IATA	II

14.5. Environmental hazards**14.6. Special precautions for user****14.7. Maritime transport in bulk according to IMO instruments****ADR/RID Other information**

Hazard No.	33
------------	----

IMDG Other information

EmS	F-E, S-D
-----	----------

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture**

Legislation and regulations	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, including amendments.
-----------------------------	---

15.2. Chemical safety assessment

Chemical safety assessment performed	No
--------------------------------------	----

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.
Abbreviations and acronyms used	CLP: Classification, labelling and packaging GHS: Globally Harmonized System. DNEL: Derived No Effect Limit (afleidd áhrifaleysismörk). PBT: Persistent, Bioaccumulative and Toxic PNEC: Predicted No Effect Concentration vPvB: Very Persistent and very Bioaccumulative REACH: Registration, Evaluation, Authorization and Restriction of Chemicals.
Information added, deleted or revised	Section 2: Outdated hazard and precautionary statements removed, since they were from the old regulation.
Version	3
Prepared by	Birgir Ö. Gudmundsson (Ph.D Chemistry); email: birgir@tandur.is