Hreinsispritt - Version 3 Page 1 of 11

SAFETY DATA SHEET

Hreinsispritt

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	14.07.2016

1.1. Product identifier

Product name	Hreinsispritt
Article no.	1428002

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

Use of the substance / mixture	Disinfectant.
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	Hestháls 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
	Telephone number: 112 Description: EMERGENCY#

Hreinsispritt - Version 3 Page 2 of 11

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

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 precautionary measures against 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
Ethanol	CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5 REACH Reg. No.: 01-211945761 Synonyms for section 3: Ethanol	F; R11 Flam. Liq. 2; H225 Eye Irrit. 2; H319	65 - 70 % wt/wt
Propan-2-ol	CAS No.: 67-63-0 EC No.: 200-661-7 Index No.: 603-117-00-0 Synonyms for section 3: Propan-2-ol	F;R11 Xi;R36 R67 Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	5 % wt/wt

SECTION 4: First aid measures

Hreinsispritt - Version 3 Page 3 of 11

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 See section 8.2 protective equipment for first aid responders

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.
Hazardous combustion products	Not known.

Hreinsispritt - Version 3 Page 4 of 11

6.1.2. For emergency responders

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

Preventititve 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 containers 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 TWA Year: 2011	
	FC No.: 200-578-6	Limit value (8 h) : 1920 mg/	

Hreinsispritt - Version 3 Page 5 of 11

Index No.: 603-002-00-5 m3 REACH Reg. No.: 01-211945761 Synonyms for section 3: Ethanol Propan-2-ol CAS No.: 67-63-0 Limit value (8 h): 400 ppm TWA Year: 2011 EC No.: 200-661-7 Limit value (8 h): 999 mg/ Index No.: 603-117-00-0 m3 Synonyms for section 3: Limit value (short term) Propan-2-ol Value: 500 ppm Limit value (short term) Value: 1250 mg/m3 Substance Ethanol DNEL Group: Worker Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 950 mg/m3 Group: Worker Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 343 mg/kg bw/day **PNEC** Route of exposure: Water Value: 0,79 mg/l Reference: Marine water Route of exposure: Sewage treatment plant STP Value: 580 mg/l Route of exposure: Water Value: 0,96 mg/l Reference: Fresh water Substance Propan-2-ol **PNEC** Route of exposure: Water Value: 140,9 mg/l Reference: Marine water

Route of exposure: Sewage treatment plant STP

Value: 2251 mg/l

Route of exposure: Sediment

Value: 552 mg/kg

Route of exposure: Soil Value: 28 mg/kg

Route of exposure: Water Value: 140,9 mg/l Reference: Freshwater

8.2. Exposure controls

Limitation of exposure on 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

Hreinsispritt - Version 3 Page 6 of 11

must be available at the work site.

Safety signs





Precautionary measures to prevent exposure

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

Respiratory protection

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

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: >= 0,4 mm
Skin- / hand protection, long term contact	Butylrubber: Penetration time: >= 480 min Material thickness: >= 0,7 mm
Reference to relevant standard	Chemical-resistant protective gloves (EN 374).

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

Skin protection

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

Appropriate environmental exposure control

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

Hreinsispritt - Version 3 Page 7 of 11

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Clear liquid.
Colour	Light blue.
Odour	Alcohol.
рН	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
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

10.6. Hazardous decomposition products

Hazardous decomposition	No hazardous decomposition products.
products	

SECTION 11: Toxicological information

Hreinsispritt - Version 3 Page 8 of 11

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

Toxicological data for substances

Substance	Ethanol
Inhalation	Drowsiness, dizziness, disorientation, vertigo.
Skin contact	Acts as a defatting agent on skin. May cause cracking of skin, and eczema.
Eye contact	Irritating.
Ingestion	Drowsiness, dizziness, disorientation, vertigo.
Mutagenicity	Based on available data the classification criteria are not met.
Carcinogenicity, other information	This substance has no evidence of carcinogenic properties.
General respiratory or skin sensitisation	Not sensitizing.
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

Potential acute effects

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.

Carcinogenic, Mutagenic or Reprotoxic

Carcinogenicity, other information	Data lacking.
Mutagenicity	Data lacking.
Reproductive toxicity	Data lacking.

SECTION 12: Ecological information

12.1. Toxicity

Toxicological data for substances

|--|

Hreinsispritt - Version 3 Page 9 of 11

Aquatic toxicity, fish Value: = 14,2 g/L Test duration: 96 h Species: Pimephales promelas Method: US EPA method E03-05 Aquatic toxicity, algae Value: = 22,6 g/L Test duration: 9 d **Species:** Nostoc species Method: OECD Guideline 201 Aquatic toxicity, crustacean Value: = 5012 mg/l Test duration: 48 h Species: Ceriodaphnia dubia Method: ASTM E729-80 PBT assessment results Not Classified as PBT/vPvB by current EU criteria. Substance Propan-2-ol Aquatic toxicity, fish **Value:** ~ 9600 mg/l Test duration: 96 h Aquatic toxicity, crustacean **Value:** ~ 1400 mg/l Test duration: 48 h PBT assessment results This substance is not classified as PBT or vPvB.

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain a	my 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.
vPvB evaluation results	No data available on mixture. Contains no PBT or vPvB substances. See section 2.3

12.6. 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.

Hreinsispritt - Version 3 Page 10 of 11

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

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

14.7. Maritime transport in bulk according to IMO instruments

ADR/RID Other information

SECTION 15: Regulatory information

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

Hreinsispritt - Version 3 Page 11 of 11

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 R-phrases (under headings 2 and 3).	R36 Irritating to eyes. R11 Highly flammable. R67 Vapours may cause drowsiness and dizziness.
List of relevant H-phrases (Section 2 and 3)	H336 May cause drowsiness or dizziness. H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.
Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 2; H225;
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.
Version	3
Prepared by	Birgir Ö. Gudmundsson (Ph.D Chemistry); email: birgir@tandur.is