



SAFETY DATA SHEET

According to Regulation (EC) 453/2010 (REACH)

Page 1 of 7 printed 2018-02




1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING		Trade name: Ethanol 50±10% v/v, Spirit of Hven Organic Single Malt Whisky Product Identifier: Ethanol in Water ~50±10% v/v Chemical name: Ethanol, Ethyl alcohol, C ₂ H ₅ OH Product names:																																																																										
<table border="1"><tr><td>CAS-nr</td></tr><tr><td>64-17-5</td></tr><tr><td>EC-nr</td></tr><tr><td>200-578-6</td></tr><tr><td>Index-nr</td></tr><tr><td>603-002-00-5</td></tr></table>		CAS-nr	64-17-5	EC-nr	200-578-6	Index-nr	603-002-00-5	<table border="1"><thead><tr><th>Generic</th><th>%vol</th><th>EAN 100ml</th><th>EAN 500ml</th><th>EAN 750ml</th></tr></thead><tbody><tr><td>Organic Single Malt Whisky Seven Stars no.1 Dubbe</td><td>45</td><td>735004485 9861</td><td>735004485 9823</td><td></td></tr><tr><td>Organic Single Malt Whisky Seven Stars no.2 Merak</td><td>45</td><td>735004485 9847</td><td>735004485 9830</td><td></td></tr><tr><td>Organic Single Malt Whisky Seven Stars no.3 Phecda</td><td>45</td><td>735004485 9045</td><td>735004485 9038</td><td></td></tr><tr><td>Organic Single Malt Whisky Seven Stars no.4 Megrez</td><td>45</td><td>735004485 9243</td><td>735004485 9236</td><td></td></tr><tr><td>Organic Single Malt Whisky Seven Stars no.5 Alioth</td><td>45</td><td>735004485 9212</td><td>735004485 9205</td><td></td></tr><tr><td>Organic Single Malt Whisky Seven Stars no.6:1 Mizar</td><td>45</td><td>735004485 9922</td><td>735004485 9939</td><td></td></tr><tr><td>Organic Single Malt Whisky Seven Stars no.6:2 Alcor</td><td>45</td><td>735004485 9946</td><td>735004485 9953</td><td></td></tr><tr><td>Organic Single Malt Whisky Seven Stars no.7 Alkaid</td><td>45</td><td></td><td></td><td></td></tr><tr><td>Organic Single Malt Whisky Tycho's Star</td><td>41,8</td><td>735004485 9106</td><td>735004485 9113</td><td>735004485 9250</td></tr><tr><td>Single Malt Whisky, Single Cask Sankt Ibb</td><td>51,4</td><td>735004485 9076</td><td>735004485 9052</td><td></td></tr><tr><td>Organic Single Malt Whisky Single Cask, Sankt Claus</td><td>53,2</td><td>735004485 9090</td><td>735004485 9083</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>				Generic	%vol	EAN 100ml	EAN 500ml	EAN 750ml	Organic Single Malt Whisky Seven Stars no.1 Dubbe	45	735004485 9861	735004485 9823		Organic Single Malt Whisky Seven Stars no.2 Merak	45	735004485 9847	735004485 9830		Organic Single Malt Whisky Seven Stars no.3 Phecda	45	735004485 9045	735004485 9038		Organic Single Malt Whisky Seven Stars no.4 Megrez	45	735004485 9243	735004485 9236		Organic Single Malt Whisky Seven Stars no.5 Alioth	45	735004485 9212	735004485 9205		Organic Single Malt Whisky Seven Stars no.6:1 Mizar	45	735004485 9922	735004485 9939		Organic Single Malt Whisky Seven Stars no.6:2 Alcor	45	735004485 9946	735004485 9953		Organic Single Malt Whisky Seven Stars no.7 Alkaid	45				Organic Single Malt Whisky Tycho's Star	41,8	735004485 9106	735004485 9113	735004485 9250	Single Malt Whisky, Single Cask Sankt Ibb	51,4	735004485 9076	735004485 9052		Organic Single Malt Whisky Single Cask, Sankt Claus	53,2	735004485 9090	735004485 9083						
CAS-nr																																																																												
64-17-5																																																																												
EC-nr																																																																												
200-578-6																																																																												
Index-nr																																																																												
603-002-00-5																																																																												
Generic	%vol	EAN 100ml	EAN 500ml	EAN 750ml																																																																								
Organic Single Malt Whisky Seven Stars no.1 Dubbe	45	735004485 9861	735004485 9823																																																																									
Organic Single Malt Whisky Seven Stars no.2 Merak	45	735004485 9847	735004485 9830																																																																									
Organic Single Malt Whisky Seven Stars no.3 Phecda	45	735004485 9045	735004485 9038																																																																									
Organic Single Malt Whisky Seven Stars no.4 Megrez	45	735004485 9243	735004485 9236																																																																									
Organic Single Malt Whisky Seven Stars no.5 Alioth	45	735004485 9212	735004485 9205																																																																									
Organic Single Malt Whisky Seven Stars no.6:1 Mizar	45	735004485 9922	735004485 9939																																																																									
Organic Single Malt Whisky Seven Stars no.6:2 Alcor	45	735004485 9946	735004485 9953																																																																									
Organic Single Malt Whisky Seven Stars no.7 Alkaid	45																																																																											
Organic Single Malt Whisky Tycho's Star	41,8	735004485 9106	735004485 9113	735004485 9250																																																																								
Single Malt Whisky, Single Cask Sankt Ibb	51,4	735004485 9076	735004485 9052																																																																									
Organic Single Malt Whisky Single Cask, Sankt Claus	53,2	735004485 9090	735004485 9083																																																																									
 																																																																												
ORGANIC & ETHICAL TRADE CERTIFIED BY: SE-EKO-01		Intended usage: Natural fermented and distilled alcohol for consumption as beverage. Company: Spirit of Hven Backafallsbyn AB Norrebrogsvägen 55 SE-260 13 Sankt Ibb, Sweden Phone: +46 418 449 999 E-mail: hm@backafallsbyn.se Prepared by: Henric N Molin																																																																										

SAFETY DATA SHEET

According to Regulation (EC) 453/2010 (REACH)

Page 2 of 7 printed 2018-02

2. HAZARDS IDENTIFICATION  FLAMMABLE LIQUID GHS02	2.1 Classification of the substance or Mixture 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: <i>Flammable liquid and vapour(category 3), H226, GHS02</i>					
	2.2 Label elements: 2.2.1 Lable according to Regulation (EC) No 1272/2008 [CLP]: <i>The product is classified and labelled according to the CLP regulation</i> 2.2.2 Hazard pictogram <i>See left</i> 2.2.3 Signal word <i>Warning</i> 2.2.2 Hazard statement <i>H226 Flammable liquid and vapour</i> 2.2.2 Precautionary statements <i>P280 Wear protective gloves/protective clothing/ eye protection/ face protection</i> <i>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking</i> <i>P241 Use explosion-proof electrical/ ventilation/ lightning/ equipment</i> <i>P240 Ground/ bond container and receiving equipment</i> <i>P303+P361+P353 IF ON SKIN (or hair): Take off imidiately all contaminated clothing. Rinse skin with water/ shower.</i> <i>P501 Dispose of contents/ container in accordance with local/ regional/ national/ international regulations</i>					
	2.3 Other Hazards: 2.3.1 Result of PBT and vPvB assessment <i>PBT: Not applicable</i> <i>vPvB: Not applicable</i>					
3. COMPOSITION / INFORMATION ON INGREDIENTS	Substance Name	C.A.S. No.	EINECS No.	Index-No. in CLP Annex IV	Classification	Concentration
	Water	7732-18-5	231-791-2	-	Not Classified	40-60%
	Ethanol	64-17-5	200-578-6	603-002-00-5	Not Classified	40-60%
	Formula:			H2O (water)	C2H5OH (ethanol)	
Molecular Weight:			18,02 g/mol (water)	46,07 g/mol (ethanol)		

SAFETY DATA SHEET

According to Regulation (EC) 453/2010 (REACH)

Page 3 of 7 printed 2018-02





<p>4. FIRST-AID MEASURES</p>	<p>General: Never give anything by mouth to an unconscious person. Move out of dangerous area. When in doubt or when symptom(s) remains – seek medical advice.</p> <p>Inhalation: If irritation occurs, remove the person to fresh air and rest. If irritation remains seek medical advice.</p> <p>Contact with skin: Remove contaminated clothes. Wash with water make sure to lotion skin.</p> <p>Contact with eyes: Rinse with plenty of water and consult an ophthalmologist if condition not improves.</p> <p>Swallowing: If over consumption, drink plenty of water. Induce vomiting only upon the advice of a physician. If trouble remains seek medical advice</p>				
<p>5. FIRE-FIGHTING MEASURES</p>	<p>5.1 Extinguishing media</p> <p>Extinguishing media: Water Foam CO 2 Powder</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> </table> <p>Co-ordinate fire-fighting measures to the fire surroundings. Makes explosive mixtures with air, extremely flammable. May explode in a fire. Hazardous decomposition gases: Carbon monoxide(CO), Carbon dioxide(CO₂) Avoid inhalation of smoke.</p> <p>5.2 Special Hazards arising from substance or mixture, Hazardous combustion products: Formation of toxic gases is possible during heating or in case of fire</p> <p>5.3 Advice for firefighters, Special protective equipment for firefighters: Wear self-containing respiratory protective device</p>	X	X	X	X
X	X	X	X		
<p>6. ACCIDENTAL RELEASE MEASURES</p>	<p>Measures for personal safety: Provide ventilation. Shut off or remove all possible sources of ignition. Full protective clothing.</p> <p>Environmental measures: Do not discharge into the drains/surface waters/groundwater. No other environmental measures are necessary.</p> <p>Cleaning methods: Do not allow runoff to sewer. Use absorbent material (e.g. sand, silica gel, vermikulit, acid binder, universal binder etc.), take up mechanically and dispose of appropriately.</p>				

SAFETY DATA SHEET

According to Regulation (EC) 453/2010 (REACH)

Page 4 of 7 printed 2018-02

<p>7. HANDLING AND STORAGE</p>	<p>Ensure adequate ventilation, do not breathe vapours. Follow advice against fire and explosion. Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Contact lenses are not recommended.</p> <p>May attack some plastics, rubber and coatings. Ground the container and transfer equipment to eliminate static electric sparks.</p> <p>Store in a cool, dry, well-ventilated place, protected from foreign odours. Keep separated from oxidizing substances, unsaturated oils, metal salts, and sources of direct heat or naked flames. Store dry in original packaging, shrink or stretch wrapped on pallets. Do not pile up. Pay attention to anti-explosion rules.</p> <p>Storage class (VCI): 3A</p> <p>Storing temperature: +1 - +25 degrees Celsius</p> <p>Storing Humidity: Below 80% Relative Humidity</p>																					
<p>8. EXPOSURE CONTROLS / PERSONAL PROTECTION</p>  <p>PROTECTIVE GLOVES</p>  <p>TIGHTLY SEALED GOGGLES</p>	<p>Exposure limit values (EH40)</p> <table border="1" data-bbox="568 875 1430 1025"><thead><tr><th>CAS Nr</th><th>Substance</th><th>ml/m³</th><th>mg/m³</th><th>F/ml</th><th>Category</th><th>Origin</th></tr></thead><tbody><tr><td>64-17-5</td><td>Ethanol</td><td>500</td><td>1000</td><td></td><td>TWA (8h)</td><td>WEL</td></tr><tr><td>64-17-5</td><td>Ethanol</td><td>1000</td><td>1920</td><td></td><td>STEL (15min)</td><td>WEL</td></tr></tbody></table> <p>Protection for respiratory tract: Use adequate protective respiratory equipment if necessary. Respiratory protection must be used if the general level exceeds the Occupational Exposure Level (OEL). Filter classification A.</p> <p>Protection for eyes: In general, safety goggles are recommended.</p> <p>Protection for skin: Use clothing that provides comprehensive protection to the skin.</p> <p>Protection for hands: Recommended. Following directive 89/686/EEC and EN374. Nitril, butyl rubber, NBR</p>	CAS Nr	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin	64-17-5	Ethanol	500	1000		TWA (8h)	WEL	64-17-5	Ethanol	1000	1920		STEL (15min)	WEL
CAS Nr	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin																
64-17-5	Ethanol	500	1000		TWA (8h)	WEL																
64-17-5	Ethanol	1000	1920		STEL (15min)	WEL																
<p>9. PHYSICAL AND CHEMICAL PROPERTIES</p>	<p>Appearance: Liquid, Hygroscopic</p> <p>Colour: Light to dark brown/red</p> <p>Odour: Whiskey character with vanilla and smoke</p> <p>Molecular weight: 46,07</p> <p>Flashpoint: 24-33 °C</p> <p>Boiling Point: ~78 °C (100% v/v Ethanol)</p> <p>pH: Neutral (6,9)</p> <p>Solubility: Soluble in water and most organic solvents</p> <p>Hazard identification:</p> <p>Ignition temperature: 420-425°C</p> <p>Explosion limits: Lower: 3,5% v/v ; Upper: 19% v/v</p> <p>Vapour pressure: 5,9 kPa (20 °C, 100% v/v Ethanol)</p> <p>Density: 0,948 kg/dm³ (20 °C, 40% v/v Ethanol)</p>																					

SAFETY DATA SHEET

According to Regulation (EC) 453/2010 (REACH)


Page 5 of 7 printed 2018-02

<p>10. STABILITY AND REACTIVITY</p>	<p><u>Stability:</u> Avoid heat, sparks, flames. Stable under normal conditions. Will not polymerize</p> <p><u>Conditions to avoid</u> Reacts strongly with alkali metals, alkaline earths, oxidising agents (such as perchlorates, CrO₃, halogen oxides, peroxy compounds, perchloric acid, non-metallic oxides, nitric acid, KMnO₄, salts of halogen, oxyacids), halogen-halogen compounds, alkali oxides, non-metallic halides, anhydrides/ sodium acetate/ acids, ethylene oxide, fluorine, hydrides, mercury compounds, silver compounds, chromyl chloride, UF₆; Capable of exploding with air in a vaporous/gaseous stat.</p> <p>Avoid oxidizing substances, unsaturated oils, metal salts.</p> <p>Hazardous decomposition products: Carbon dioxide and carbon monoxide.</p>																
<p>11. TOXICOLOGICAL INFORMATION</p>	<p><u>Health Warning:</u> When concentration is more than 50%, ethanol causes local mucosal lesions through dehydration and albumin precipitation. Absorption, which occurs swiftly from the gastrointestinal tract, causes euphoria, with subsequent dizziness, inebriation, paralysis, diminished reflex, excitability, cyanosis, narcosis and respiratory paralysis. Dangerous intolerance reactions and increased absorption occur through the simultaneous action of disulfiram, trichloroethylene, tetra-chloromethane, nitrobenzene, carbon disulfide, aniline, lime-nitrogen, arsenic, lead and mercury. CNS depressant. Repeated exposure may cause chronic eye irritation. Defatting, drying and cracking of skin. Mild dermatitis, allergic skin rash. Swallowing concentrated chemical may cause severe internal injury.</p> <p><u>Medical Symptoms:</u> Rhinitis (inflammation of the nasal mucous membranes). Upper respiratory irritation. Skin irritation. Nausea, vomiting.</p> <p><u>Medical Considerations:</u> Convulsive disorders, CNS problems.</p> <p><u>Toxic dose 1-LD50:</u></p> <table border="1" data-bbox="550 1220 1444 1355"> <thead> <tr> <th>Exposure</th> <th>Value/Unit</th> <th>Specie</th> <th>Exposure time</th> </tr> </thead> <tbody> <tr> <td>Oral LD50</td> <td>7060 mg/kg</td> <td>Rat (ethanol)</td> <td></td> </tr> <tr> <td>Dermal LD50</td> <td>>20000 mg/kg</td> <td>Rabbit (ethanol)</td> <td></td> </tr> <tr> <td>Respiratory LC50</td> <td>>8000 mg/kg</td> <td>Rat (ethanol)</td> <td>4h</td> </tr> </tbody> </table> <p>(corresponds to approx. 1,9cl/kg 40% v/v, or 1,5litre for a 80kg person)</p>	Exposure	Value/Unit	Specie	Exposure time	Oral LD50	7060 mg/kg	Rat (ethanol)		Dermal LD50	>20000 mg/kg	Rabbit (ethanol)		Respiratory LC50	>8000 mg/kg	Rat (ethanol)	4h
Exposure	Value/Unit	Specie	Exposure time														
Oral LD50	7060 mg/kg	Rat (ethanol)															
Dermal LD50	>20000 mg/kg	Rabbit (ethanol)															
Respiratory LC50	>8000 mg/kg	Rat (ethanol)	4h														
<p>12. ECOLOGICAL INFORMATION</p>	<p><u>Ethanol:</u> Fish LC50 (96h): 13480 mg/l P.promelas Daphnia magna EC50 (48h): 5400 mg/l Alge IC-50 (7d): 5000 ng/l Scenedesmus subspicatus Ethanol is biodegradable. No indication to bioaccumulation potential.</p> <p><u>Ethanol:</u> BOD₅/COD=0,4-0,8 BOD₁₀=65-74% of TbOD BCF:<10 Log P (o/w)<1</p>																
<p>13. DISPOSAL CONSIDERATIONS</p>	<p>Dispose of waste according to applicable local, state and federal regulations. Sweden: classified as hazardous waste (SFS 2001:1063) Waste group: 140105 (EWC) Recommended cleansing agents: Water, if necessary together with cleansing agents.</p>																

SAFETY DATA SHEET

According to Regulation (EC) 453/2010 (REACH)

Page 6 of 7 printed 2018-02

<p>14. TRANSPORT INFORMATION</p> 	<p>14.1 UN-number 14.1.1 ADR, IMDG, IATA UN1170 14.1.2 ADR ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) 14.1.3 IMDG ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) 14.1.4 IATA ETHANOL SOLUTION 14.3 Transport hazard classes 14.3.1 ADR, IMDG, IATA See left 14.3.2 Class 3 Flammable liquids 14.3.3 Label 3 14.4 Packing group 14.4.1 ADR, IMDG, IATA III 14.5 Environmental hazards Not Applicable 14.6 Special precautions for user Warning: Flammable liquids Danger code (Kemler): 30 EMS Number: F-E, S-D 14.7 Transport in bulk according to Annex II of Marpol and the IBC code Not applicable Transport/ Additional information -ADR Limited quantities (LQ): 5L Transport category: 3 Tunnel restriction code: D/E</p>
<p>15. REGULATORY INFORMATION</p> <p>Persons under 18 years of age should not work with this product.</p>	<p>15.1 Safety, health and environmental regulations/legislation specific for the substances or mixtures Directive 2012/18/EU Named dangerous substances – Annex 1. None of the ingredients are listed. Seveso category: P5c FLAMMABLE LIQUIDS Regulation (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3</p>

SAFETY DATA SHEET

According to Regulation (EC) 453/2010 (REACH)

Page 7 of 7 printed 2018-02

<p>16. OTHER INFORMATION</p> <p>UPDATED TO COMPLY WITH REGULATION (EC) NO. 1907/2006</p>	<p><i>The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety of performance considerations may arise when using, handling and/or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. Spirit of Hven makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purpose or the consequences of such use, and shall not be liable for any damages or loss, howsoever arising, direct or otherwise.</i></p>
---	--

Date: February 5th 2018

This Safety Data Sheet information replaces all previous ones, latest of: This computer generated Safety Data Sheet is valid without signature

*Safety Data Sheet validated by: Master Distiller Henric N Molin
 Spirit of Hven Backafallsbyn*