



**SECTION 1: IDENTIFICATION**

<b>1.1 Product identifier</b>	
<b>Product name:</b>	Vetivex 9® (Ringer's Solution for Infusion)
<b>Synonyms:</b>	None
<b>Proper Shipping name:</b>	Not Available
<b>Other means of identification:</b>	None
<b>1.2 Relevant identified uses of the substances or mixture and uses advised against</b>	
<b>Recommended uses:</b>	This product is administered by intravenous infusion for the treatment of dehydration in cattle, calves, horses, dogs and cats. It may be used to correct volume depletion resulting from shock or gastrointestinal disease, especially where hypokalaemia is present (e.g. in cases of sustained vomiting).
<b>Uses advised against:</b>	Not for human use.
<b>1.3 Details of the supplier of the substance or mixture</b>	
<b>Registered company name:</b>	Dechra Ltd
<b>Address:</b>	Snaygill Industrial Estate Keighley Road Skipton North Yorkshire BD23 2RW UK
<b>Telephone:</b>	+44 (0) 1756 791311
<b>Fax:</b>	+44 (0) 1756 798604
<b>Email:</b>	Not available
<b>1.4 Emergency Telephone Numbers</b>	
	+44 (0) 1756 791311

**SECTION 2: HAZARDS IDENTIFICATION**

<b>2.1 Classification of the substance or mixture</b>	
<b>DSD Classification (EU):</b>	Not Available
<b>DPD Classification (EU)<sup>1</sup>:</b>	Not Available
<b>Classification according to regulation (EC) No 1272/2008 [CLP] (EU):</b>	Not Applicable

<b>2.2 Label Elements</b>	
<b>Signal Word:</b>	<b>NOT APPLICABLE</b>
<b>Hazard Statement(s)</b>	
Not Applicable	
<b>Additional Statement(s)</b>	
None	
<b>Precautionary Statement(s) Prevention:</b>	
Not Applicable	
<b>Precautionary Statement(s) Response:</b>	
Not Applicable	
<b>Precautionary Statement(s) Storage:</b>	
Not Applicable	
<b>Precautionary Statement(s) Disposal:</b>	
Not Applicable	
<b>2.3 Other Hazard Information</b>	

<b>SECTION 3: INFORMATION ON THE INGREDIENTS</b>			
<b>3.1 Substances</b>			
See section below for composition of mixtures			
<b>3.2 Mixtures</b>			
<b>1.CAS No 2.EC Number 3.Index Number 4.REACH Number</b>	<b>% w/v</b>	<b>Name</b>	<b>Classification according to regulations (EC) No 1272/2008 [CLP] (EU)</b>
1. 7647-14-5 2. 231-598-3 3. Not Available 4. 01-2119485491-33-XXXX	0.860 % w/v	Sodium chloride	None
1. 7447-40-7 2. 231-211-8 3. Not Available 4. 01-2119539416-36-XXXX	0.030 % w/v	Potassium chloride	None
1. 10035-04-8 2. Not Available	0.033 % w/v	Calcium chloride dihydrate	None



3. Not Available 4. Not Available			
N/a	Proprietary	Other ingredients determined not to be hazardous	N/a

#### SECTION 4: FIRST AID MEASURES

##### 4.1 Description of first aid measures

<b>Eye contact:</b>	In case of accidental contact of the product with the eyes, rinse with fresh water. Irritation is unlikely, but if in doubt, seek medical attention if irritation persists and show the package leaflet or the label to the medical practitioner.
<b>Skin contact:</b>	In case of accidental contact of the product with the skin, rinse fresh water. Irritation is unlikely, but if in doubt, seek medical attention if irritation persists and show the package leaflet or the label to the medical practitioner.
<b>Inhalation:</b>	Inhalation of the product is highly unlikely. If fumes are inhaled remove from contaminated area.
<b>Ingestion:</b>	If accidentally ingested, immediately give a glass of water. First aid is not generally required. If in doubt, seek medical attention and show the package leaflet or the label to the medical practitioner.

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

See Section 11

##### 4.3 Indication of immediate medical attention and special treatment needed

N/a

#### SECTION 5: FIRE FIGHTING MEASURES

##### 5.1 Extinguishing media

<b>Suitable:</b>	N/a
<b>Unsuitable:</b>	None.

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

<b>Fire incompatibility:</b>	None known
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##### 5.3 Special protective actions for fire-fighters:

<b>Firefighting:</b>	N/a
<b>Fire / explosion hazard:</b>	Not flammable.



**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

For information on protective equipment, see section 8.

**6.2 Environmental Precautions**

Do not allow product to reach sewage system or any water course.  
 Inform respective authorities in case of seepage into water course or sewage system.  
 Do not allow to enter sewers/surface or ground water.

**6.3 Methods and material for containment and cleaning up**

<b>Minor Spills:</b>	If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water.
<b>Major Spills:</b>	Not considered harmful to the environment. If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise, contain with sand and transfer to salvage container. Arrange removal by disposal company.

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

<b>Safe Handling:</b>	Wear suitable protection gloves and clothing when handling the product. Wash hands after using the product. When handling, <b>DO NOT</b> eat, drink or smoke. Observe manufacturer's storage and handling recommendations.
<b>Other Information:</b>	Do not store above 25°C. Do not freeze. Avoid high humidity. Keep out of the reach and sight of children.

**7.2 Conditions for safe storage, including any incompatibilities**

<b>Suitable Container:</b>	Shelf life of the veterinary medicinal product as packaged for sale: 2 years.
<b>Storage incompatibility:</b>	Unknown.

**7.3 Specific end uses**

Not available

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 Control parameters**

**OCCUPATIONAL EXPOSURE LIMITS (OEL)**

**INGREDIENT DATA:**

Not Available

**EMERGENCY LIMITS:**

Ingredient	Material Name	TEEL-1	TEEL-2	TEEL-3
Sodium chloride	Chloride; (Chloride(1-); Chloride ions)	0.5 ppm	2 ppm	20 ppm

Ingredient	Original IDLH	Revised IDLH
Not Available		

**8.2 Exposure controls**

<b>Appropriate engineering controls:</b>	The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the particular risk.
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<b>Personal protection:</b>	
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<b>Eye and face protection:</b>	Safety glasses with side shields / chemical goggles
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<b>Skin protection:</b>	See hand protection below
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<b>Hands/ feet protection:</b>	No special equipment needed when handling small quantities. OTHERWISE: Wear chemical protective gloves
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<b>Body protection:</b>	Wear appropriate clothing
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<b>Other protection:</b>	No special equipment needed when handling small quantities
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<b>Thermal hazards:</b>	Not applicable
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<b>Respiratory protection:</b>	Not applicable
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**8.3 Environmental exposure controls**  
 See Section 12

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

**Appearance:** Clear, colourless solution for infusion.  
**Container:** Presented in polyvinylchloride (PVC) infusion bags, overwrapped with polypropylene, in cartons of 50 x 100 ml, 20 x 250 ml, 20 x 500 ml, 10 x 1000 ml, 4 x 2000 ml, 4 x 3000 ml and 2 x 5000 ml.  
**Physical state:** Solution  
**Odour:** Not available  
**Odour Threshold:** Not available  
**pH (as supplied):** Not available  
**Melting point / freezing point (degrees C):** Not available  
**Initial boiling point and boiling range:** Not available  
**Flash Point:** Not available  
**Evaporation rate:** Not available  
**Flammability:** Not available  
**Upper/lower flammability or explosive limits:** Not available  
**Vapour pressure:** Not available  
**Relative Density (at degrees C):** Not available  
**Solubility in water and solvents (mg/l):** Soluble  
**Vapour density:** Not available  
**Auto ignition temperature (degrees C):** Not available  
**Decomposition temperature (degrees C):** Not available  
**Viscosity: (degrees C):** Not available  
**Explosive properties:** Not available  
**Oxidising properties:** Not available  
**Partition Coefficient:** Not available  
**Molecular weight:** Not available  
**Taste:** Not available  
**Surface tension:** Not available  
**Volative component:** Not available  
**Gas group:** Not available  
**pH as a solution:** 5.0 to 7.5  
**VOC g/L:** Not available

**9.2 Other information**  
 Not Available

**10: REACTIVITY AND STABILITY**

<b>10.1 Reactivity:</b>	See Section 7
<b>10.2 Chemical stability:</b>	Product is considered stable.
<b>10.3 Possibility of hazardous reactions:</b>	Stable under normal temperatures and conditions.
<b>10.4 Conditions to avoid:</b>	See section 7.
<b>10.5 Incompatible materials:</b>	See section 7.

<b>10.6 Hazardous decomposition:</b>	See Section 5.
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<b>SECTION 11: TOXICOLOGICAL INFORMATION</b>
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<b>Inhalation:</b>	If handled accordingly, no danger for humans.	
<b>Ingestion:</b>	If handled accordingly, no danger for humans.	
<b>Skin contact:</b>	If handled accordingly, no danger for humans.	
<b>Eye contact:</b>	If handled accordingly, no danger for humans.	
<b>Chronic:</b>	If handled accordingly, no danger for humans.	
<b>VETIVEX 9®:</b>	<b>Acute toxicity</b>	<b>Irritation</b>
	Not Available	Not Available
<b>Sodium Chloride:</b>	<b>Acute toxicity</b>	<b>Irritation</b>
	Dermal (rabbit) LD <sub>50</sub> : >10000 mg/kg <sup>1</sup> Oral (rat) LD <sub>50</sub> : 3000 mg/kgd <sup>2</sup>	Eye (rabbit): 10mg – moderate Eye (rabbit): 100 mg/24h – moderate Skin (rabbit): 500 mg/24h - mild
<b>Potassium Chloride:</b>	<b>Acute toxicity</b>	<b>Irritation</b>
	Oral (rat) LD <sub>50</sub> : 2600 mg/kg <sup>2</sup>	Eye (rabbit): 500 mg/24h - mild
<b>Calcium chloride dihydrate:</b>	<b>Acute toxicity</b>	<b>Irritation</b>
	No data available	No data available

*1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. \* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances*

<b>Skin corrosion/ irritation:</b>
Not Available
<b>Serious eye damage/ irritation:</b>
Not available
<b>Respiratory or skin sensitization:</b>
Not available
<b>Germ cell mutagenicity:</b>
Not available



SECTION 11: TOXICOLOGICAL INFORMATION	
<b>Carcinogenicity:</b>	
Not available	
<b>Reproductive toxicity:</b>	
Not available	
<b>STOT – single exposure:</b>	
Not available	
<b>STOT–repeated exposure:</b>	
Not available	
<b>Aspiration hazard:</b>	
Not available	

SECTION 12: ECOLOGICAL INFORMATION					
12.1 Toxicity					
Ingredient	Endpoint	Test duration (hr)	Species	Value	Source
Sodium chloride	LC <sub>50</sub>	96	Fish	1000 mg/L	1
Sodium chloride	EC <sub>50</sub>	48	Crustacea	402.6 mg/L	1
Sodium chloride	EC <sub>50</sub>	96	Algae or other aquatic plants	2430 mg/L	1
Sodium chloride	NOEC	6	Fish	0.001 mg/L	1
Potassium chloride	LC <sub>50</sub>	96	Fish	29.8000mg/L	2
Potassium chloride	EC <sub>50</sub>	48	Crustacea	83mg/L	2
Potassium chloride	EC <sub>50</sub>	96	Algae or other aquatic plants	1337mg/L	2
Potassium chloride	NOEC	48	Crustacea	240.45mg/L	2
1. US EPA, Ecotox database - Aquatic Toxicity Data, 2. US EPA, Ecotox database - Aquatic Toxicity Data					



<b>12.2 Persistence and degradability</b>		
<b>Ingredient</b>	<b>Persistence: Water/Soil</b>	<b>Persistence: Air</b>
Sodium chloride	LOW	LOW
Potassium chloride	HIGH	HIGH
<b>12.3 Bioaccumulative potential</b>		
<b>Ingredient</b>	<b>Bioaccumulative potential</b>	
Sodium chloride	LOW (LogKOW = 0.5392)	
Potassium chloride	LOW (LogKOW = -0.4608)	
<b>12.4 Mobility in Soil</b>		
<b>Ingredient</b>	<b>Mobility</b>	
Sodium chloride	LOW (KOC = 14.3)	
Potassium chloride	LOW (KOC = 14.3)	
<b>12.5 Results of PBT and vPvB assessment</b>		
Not Available		
<b>12.6 Other adverse effects</b>		
Not Available		

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

<b>Product / packaging disposal:</b>	<p>Any unused veterinary medicinal product or waste material derived from such veterinary medicinal products should be disposed of in accordance with national requirements.</p> <p>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.</p> <p>Ensure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.</p>
<b>Waste Treatment Options:</b>	Not Available
<b>Sewage Disposal Options:</b>	Not Available

**SECTION 14: TRANSPORT INFORMATION**

<b>Labels required:</b>	None
<b>Marine pollutant:</b>	NO
<b>Hazchem:</b>	Not Applicable

**Land transport (ADR):**

<b>14.1 UN Number</b>	N/a	
<b>14.2 UN Proper Shipping Name</b>	N/a	
<b>14.3 Transport hazard class(es)</b>	Class	N/a
	Sub risk	N/a
<b>14.4 Packing group</b>	N/a	
<b>14.5 Environmental hazards</b>	N/a	
<b>14.6 Special precautions for user</b>	Special provisions	N/a
	Classification code	N/a
	Hazard Label	N/a
	Special provisions	N/a
	Limited quantity	N/a

<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	N/a
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**Air transport (ICAO-IATA / DGR):**

<b>14.1 UN Number</b>	N/a	
<b>14.2 UN Proper Shipping Name</b>	N/a	
<b>14.3 Transport hazard class(es)</b>	ICAO/IATA Class	N/a
	ICAO / IATA Sub risk	N/a
	ERG Code	N/a

<b>14.4 Packing group</b>	N/a	
<b>14.5 Environmental hazards</b>	N/a	
<b>14.6 Special precautions for user</b>	Special provisions	N/a
	Cargo only packing instructions	N/a
	Cargo only maximum qty/pack	N/a
	Passenger and cargo packaging instructions	N/a
	Passenger and cargo maximum qty/pack	N/a
	Passenger and cargo limited quantity packing instructions	N/a
	Passenger and cargo limited maximum qty/pack	N/a
<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	N/a	
<b>Sea transport (IMDG-Code / GGVSee):</b>		
<b>14.1 UN Number</b>	N/a	
<b>14.2 UN Proper Shipping Name</b>	N/a	
<b>14.3 Transport hazard class(es)</b>	IMDG Class	N/a
	IMDG Sub risk	N/a
<b>14.4 Packing group</b>	N/a	
<b>14.5 Environmental hazards</b>	N/a	
<b>14.6 Special precautions for user</b>	EMS Number	N/a
	Special provisions	N/a
	Limited quantities	N/a

<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	N/a	
<b>Inland waterways transport (ADN):</b>		
<b>14.1 UN Number</b>	N/a	
<b>14.2 UN Proper Shipping Name</b>	N/a	
<b>14.3 Transport hazard class(es)</b>	N/a	N/a
<b>14.4 Packing group</b>	N/a	
<b>14.5 Environmental hazard</b>	N/a	
<b>14.6 Special precautions for user</b>	Classification Code	N/a
	Special provisions	N/a
	Limited quantity	N/a
	Equipment required	N/a
	Fire cones number	N/a
<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	N/a	

<b>SECTION 15: REGULATORY INFORMATION</b>
<b>15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture</b>
<b>SODIUM CHLORIDE (7647-14-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS:</b>
<ul style="list-style-type: none"> <li>• European Customs Inventory of Chemical Substances ECICS (English)</li> <li>• European Union – European Inventory of Existing Commercial Chemical Substances (EINECS) (English)</li> </ul>
<b>POTASSIUM CHLORIDE (7447-40-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS:</b>

<ul style="list-style-type: none"> <li>European Customs Inventory of Chemical Substances ECICS (English)</li> <li>European Union – European Inventory of Existing Commercial Chemical Substances (EINECS) (English)</li> </ul>			
<b>15.2 Chemical Safety Assessment</b>			
<b>ECHA SUMMARY</b>			
<b>Ingredient</b>	<b>CAS number</b>	<b>Index Number</b>	<b>ECHA Dossier</b>
Sodium chloride	7647-14-5	Not Available	01-2119485491-33-XXXX
<b>Harmonization (C&amp;L Inventory)</b>	<b>Hazard Class and Category Code(s)</b>	<b>Pictograms Signal Word Code(s)</b>	<b>Hazard Statement Code(s)</b>
1	Eye Irrit. 2	N/a	N/a
2	Eye Irrit. 2, STOT RE 2, Skin Mild Irrit. 3, Skin Irrit. 2	Wng, GHS08	H318, H373, H315, H335
Harmonization Code 1 = The most prevalent classification. Harmonization Code 2 = The most severe classification.			

<b>Ingredient</b>	<b>CAS number</b>	<b>Index Number</b>	<b>ECHA Dossier</b>
Potassium chloride	7447-40-7	Not Available	01-2119539416-36-XXXX
<b>Harmonization (C&amp;L Inventory)</b>	<b>Hazard Class and Category Code(s)</b>	<b>Pictograms Signal Word Code(s)</b>	<b>Hazard Statement Code(s)</b>
2	Eye Irrit. 2, Flam. Liq. 2, Skin Corr. 1B, Skin Irrit. 2, STOT SE 3, STOT RE 2, Aquatic Chronic 3, Acute Tox. 4	GHS02, GHS05, Dgr, GHS08	H319, H225, H314, H335, H373, H412, H302
Harmonization Code 1 = The most prevalent classification. Harmonization Code 2 = The most severe classification.			

Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (sodium chloride, potassium chloride)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	Y (sodium chloride, potassium chloride)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y



USA - TSCA	Y
<b>Legend:</b>	<i>Y = All ingredients are on the inventory        N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)</i>

**SECTION 16: OTHER INFORMATION**

The SDS is written in accordance to guidelines specified by REACH, GHS and ECHA.

**Ingredients with multiple cas numbers**

Name	CAS No
Sodium chloride	14431-43-7, 5996-10-1

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

- EN 166 Personal eye-protection
- EN 340 Protective clothing
- EN 374 Protective gloves against chemicals and micro-organisms
- EN 13832 Footwear protecting against chemicals
- EN 133 Respiratory protective devices

**Definitions and abbreviations**

- PC – TWA: Permissible Concentration-Time Weighted Average
- PC – STEL: Permissible Concentration-Short Term Exposure Limit
- STEL: Short Term Exposure Limit
- TEEL: Temporary Emergency Exposure Limit.
- IDLH: Immediately Dangerous to Life or Health Concentrations

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The information provided is not a quality specification, and is prepared by way of guidance as to the safe handling, use, processing, storage, transportation, disposal and release of the relevant products referred to. The user is responsible for determining whether or not the product is fit for any particular purpose and/or suitable for the user's proposed method of use and application.

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Safety Data Sheet  
Product Name: Vetivex 9® (Ringer's Solution for Infusion)  
Issue Date: 08/2017  
Version No: 1  
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