Product	Hoofsure Endurance
Revision Date	28/09/2016
Revision	1

Safety Data Sheet (SDS)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name	**Hoofsure Endurance**
Synonyms, Trade Names	No information available.

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses	Hoof care foot-bath solution for cattle and sheep.
Uses Advised Against	Any other purpose.

1.3 Details of the Supplier of the Safety Data Sheet

Supplier	Provita Eurotech Ltd. 21 Bankmore Road Omagh Co. Tyrone BT79 0EU United Kingdom Tel: 02882 252352
Contact Person	H&S@provita.co.uk

1.4 Emergency Telephone Number

Emergency Telephone	
National Emergency Telephone Number	Call 999 or 112.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classifcation of the Substance or Mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Liq 3- H226
Human Health	Acute Tox 4 - H302, Acute Tox 3 - H331, Skin Corr. 1B - H314, Eye Dam. 1 - H318
Environment	Not classified

2.2 Label Elements

Contains

Formic Acid
Acetic acid
Benzioc Acid

Label in Accordance With (EC) No. 1272/2008

Signal Word

Danger

Hazard Statements

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage
H331 Toxic if inhaled.

Precautionary Statements **Prevention**

P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.
P260 Do not breathe dust/fume/ gas/mist/vapours/spray.
P280 Wear protective gloves/ protective clothing/eye protection/face protection.
Response
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician
P370 + P378 In case of fire: Use water, carbon dioxide (CO2), foam, dry powder for extinction.
Storage
P403 + P235 Store in a well-ventilated place. Keep cool.

2.3 Other Hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product Identifier	GHS Classification	%
Formic Acid	CAS-No.: 64-18-6 EC No.: 200-579-1 REACH Reg No.: 01-2119491174-37-0000	Acute Tox 4 - H302, Acute Tox 3 - H331, Skin Corr. 1B - H314	30-60%
Acetic acid	CAS-No.: 64-19-7 EC No.: 200-580-7 REACH Reg No.: 01-2119475328-30-0000	Skin Corr. 1A - H314, Flam. Liq 3- H226	10-30%
Ethanol ethyl alcohol	CAS-No.: 64-17-5 EC No.: 200-578-6	Flam. Liq 2- H225	1-10%
Benzioc Acid	CAS-No.: 65-85-0 EC No.: 200-618-2 REACH Reg No.: 01-2119455536-33-0002	Eye Dam. 1 - H318, STOT SE 3 - H335	1-10%

The Full Text for all Hazard Statements Are Displayed in Section 16.

Composition Comments The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

General Information Provide general first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless how minor they may seem. First aid personnel must be aware of own risk during rescue.

Inhalation If this product is inhaled and symptoms occur, move the exposed person to fresh air promptly. If breathing is difficult, oxygen should be administered by qualified personnel. If not breathing, give artificial respiration. Get prompt medical attention.

Ingestion DO NOT induce vomiting! Get medical attention. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness or is convulsing. If this product is ingested, immediately rinse mouth and drink small amounts of water.

Skin Contact Remove affected person from source of contamination. Continue to rinse for at least 15 minutes. Immediately wash with water, preferably under a shower, removing contaminated clothing while washing proceeds. Get medical attention if irritation develops or persists.

Eye Contact Do not rub eye. Avoid contaminating unaffected eye. Promptly wash eye(s) with plenty of water while lifting the eye lids. Remove contact lenses if present and easy to do so. Continue

to rinse for at least 15 minutes. Get medical attention immediately.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

General Information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Toxic if inhaled. Headache, dizziness, coughing, breathing difficulty, tearing and burning in the eyes and nose may occur. High concentrations or prolonged exposure will cause severe damage to the respiratory tract.
Ingestion	May cause severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Harmful if swallowed. May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin Contact	Corrosive. Causes severe skin burns. Contact with liquid and mist may result in skin irritation and burns.
Eye Contact	Causes severe eye damage. Symptoms include lacrimal irritation due to vapours. Both liquid and mist can cause severe irritation and damage which may be permanent.

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

Notes to the Physician	Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Extinguishing Media	Use fire-extinguishing media appropriate for surrounding materials. Water, Carbon dioxide (CO2), Foam, Dry powder.
Unsuitable Extinguishing Media	High volume water jet.

5.2 Special Hazards Arising From the Substance or Mixture

Hazardous Combustion Products	Thermal decomposition or combustion may liberate carbon oxides and other harmful gases or vapours. The formation of caustic fumes is possible.
Unusual Fire & Explosion Hazards	FLAMMABLE. Vapours are heavier than air and may spread near ground to sources of ignition. Vapours can accumulate in low areas. Beware of vapours accumulating to form explosive concentrations
Specific Hazards	Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for Firefighters

Special Fire Fighting Procedures	Evacuate personnel to safe areas. Avoid breathing fire vapours. Ventilate closed spaces before entering them. Be aware of danger of explosion. If possible, fight fire from protected position. Keep up-wind to avoid fumes. Water spray should be used to cool containers.
Protective Equipment for Firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Eliminate all sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. If necessary evacuate surrounding areas. Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection. Use non-sparking hand tools and explosion proof electrical equipment. Read and follow manufacturer's recommendations. Do not touch or walk through spilled material.
For Emergency Responders	Follow safe handling advice and personal protective equipment recommendations for normal use of product.

6.2 Environmental Precautions

Environmental Precautions	Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body. Prevent any material from entering drains or waterways.

6.3 Methods and Material for Containment and Cleaning Up

Spill Clean Up Methods

Prevent further leakage or spillage if safe to do so. Eliminate all sources of ignition. Ventilate and evacuate the area. Wear protective clothing, goggles and respirator. Use non-sparking tools or equipment for clean up. Cover drains.
In case of a large scale of spill, dyke area with sand to stop the spill spreading. Absorb spillage with non-combustible, absorbent material - sand. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Remove waste promptly to a safe area. Wash work area with water. Wash thoroughly after dealing with a spillage.

6.4 Reference to Other Sections

Reference to Other Sections

See section 1 for emergency contact. For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Handling

Use proper personal protection when handling (refer to Section 8). Use under well-ventilated conditions. Wear appropriate respirator when ventilation is inadequate. Avoid forming spray/aerosol mists. Avoid inhalation of vapours and contact with skin and eyes.
Read and follow manufacturer's recommendations. Do not wear contact lenses. Do not mix with other chemicals. Wash thoroughly after handling.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Storage Precautions

Keep upright, locked up and out of reach of children. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from heat, sparks, direct sunlight and open flames. Avoid contact with oxidising agents.
Unsuitable storage materials: Mild steel, copper. Suitable storage materials: Stainless steel, pure aluminium, high density polyethylene, glass. Ground container and transfer equipment to eliminate static electric sparks.

Storage Class

Flammable liquid storage.

7.3 Specific End Use(s)

Specific End Use(s)

The identified uses for this product are detailed in Section 1.2.

Usage Description

Use only according to directions. Replace and tighten cap after use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
Formic Acid	OEL	5ppm	9mg/m3			IOELV.
Formic Acid	WEL	5ppm	9.8mg/m3			
Acetic acid	WEL	10ppm	25mg/m3	15ppm	37mg/m3	
Acetic acid	OEL	10ppm	25mg/m3	15ppm	37mg/m3	IOELV
Ethanol ethyl alcohol	WEL	1000ppm	1920mg/m3			
Ethanol ethyl alcohol	OEL			1000ppm		-

Ingredient Comments

Workplace Exposure Limit (WEL).
Ireland, Occupational Exposure Limits 2016.

8.2 Exposure Controls

Protective Equipment

Engineering Measures	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Provide explosion proof ventilation for high concentrations.
Respiratory Equipment	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respiratory protection as specified by an industrial hygienist or other qualified professional if concentrations exceed the limits listed in Section 8. Use respirators and components tested and approved under appropriate government standards such as CEN (EU).
Hand Protection	Selection of the glove material depends on consideration of the penetration times, rates of diffusion and degradation, and concentration specific to the workplace. Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374) is recommended. Gloves must be inspected prior to use. Suggested material: Butyl rubber. Layer thickness: 0.33 mm. Breakthrough time: 480 min. Nitrile. Layer thickness: >= 0.35 mm. Break through time: >480 min. Consult manufacturer for specific advice on material. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
Eye Protection	Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU). Goggles/face shield are recommend.
Other Protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist. Complete suit protecting against chemicals, flame retardant/anti-static. Select appropriate protective clothing based on chemical resistance data and an assessment of local exposure potential.
Hygiene Measures	Do not eat, drink or smoke during use. Wash promptly if skin becomes contaminated. Immediately take off any contaminated clothing and launder before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands at the end of each work shift and before eating, smoking and using the toilet.
Process Conditions	Ensure that eye flushing systems are located close by in the work place.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Appearance	Liquid.
Colour	Dark blue. Clear.
Odour	Acidic.
Odour Threshold - Lower	No information available.
Odour Threshold - Upper	No information available.
pH-Value, Conc. Solution	No information available.
pH-Value, Diluted Solution	2.00
Melting Point	No information available.
Initial Boiling Point and Boiling Range	No information available.
Flash Point	55.00 °C

Evaporation Rate	No information available.
Flammability State	No information available.
Flammability Limit - Lower(%)	No information available.
Flammability Limit - Upper(%)	No information available.
Vapour Pressure	No information available.
Vapour Density (air=1)	No information available.
Relative Density	1.1kg/m3 @ 20.00 °C
Bulk Density	No information available.
Solubility	Miscible with water.
Decomposition Temperature	No information available.
Partition Coefficient; n-Octanol/Water	No information available.
Auto Ignition Temperature (°C)	No information available.
Viscosity	No information available.
Explosive Properties	Not classified as explosive.
Oxidising Properties	No information available.

9.2 Other Information

Molecular Weight	No information available.
Volatile Organic Compound	No information available.
Other Information	None noted.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Reactivity	Keep away from incompatibles such as oxidizing agents, acids, and alkalis.

10.2 Chemical Stability

Stability	Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

Hazardous Reactions	Oxidising Agents: Violent reaction with hydrogen peroxide.
Hazardous Polymerisation	No Information.
Polymerisation Description	Unknown.

10.4 Conditions to Avoid

Conditions to Avoid	Heat, sparks, open flames, temperature extremes and direct sunlight.

10.5 Incompatible Materials

Materials to Avoid	Avoid contact with oxidising agents, strong alkalis, and strong acids. Metals. Bases.

10.6 Hazardous Decomposition Products

Hazardous Decomposition Products	In case of fire toxic gases can be released. May include but are not limited to oxides of carbon. When heated, toxic and corrosive vapours/gases may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Toxicological Information No toxicological information for the overall finished product.

Acute Toxicity (Oral LD50) No information available.
Acute Toxicity (Dermal LD50) No information available.
Acute Toxicity (Inhalation LD50) No information available.

Serious Eye Damage/Irritation Causes serious eye damage.

Skin Corrosion/Irritation No information available.

Respiratory Sensitisation No information available.
Skin Sensitisation No information available.

Germ Cell Mutagenicity No information available.

Carcinogenicity No information available.

Specific Target Organ Toxicity - Single Exposure:
STOT - Single Exposure No information available.
Specific Target Organ Toxicity - Repeated Exposure:
STOT - Repeated Exposure No information available.

Inhalation Toxic if inhaled. Headache, dizziness, coughing, breathing difficulty, tearing and burning in the eyes and nose may occur. High concentrations or prolonged exposure will cause severe damage to the respiratory tract.
Ingestion May cause severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Harmful if swallowed. May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin Contact Corrosive. Causes severe skin burns. Contact with liquid and mist may result in skin irritation and burns.
Eye Contact Causes severe eye damage. Symptoms include lacrimal irritation due to vapours. Both liquid and mist can cause severe irritation and damage which may be permanent.
Waste Management When handling waste and waste packaging, consideration should be made to the safety precautions applying to handling of the product.

Routes of Entry No information available.
Target Organs Eyes, skin, digestive system, respiratory system.

Aspiration Hazards: No information available.
Reproductive Toxicity: No information available.

Name	LD50 Oral	LD50 Dermal	LD50 Inhalation
Acetic acid	3310.00mg/kg Rat		>40.00mg/l (vapours) Rat 4 Hours
Benzioc Acid	2565.00mg/kg Rat	2000.00mg/kg Rabbit	
Formic Acid	730.00mg/kg Rat		7.40mg/l (vapours) Rat 4 Hours

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute Toxicity - Fish No information available.
Acute Toxicity - Aquatic Invertebrates No information available.
Acute Toxicity - Aquatic Plants No information available.
Acute Toxicity - Microorganisms No information available.
Chronic Toxicity - Fish No information available.
Chronic Toxicity - Aquatic Invertebrates No information available.
Chronic Toxicity - Aquatic Plants No information available.
Chronic Toxicity - Microorganisms No information available.
Ecotoxicity The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
Eco Toxilogical Information No ecological toxicity available on the overall finished product.

12.2 Persistence and Degradability

Degradability Readily Biodegradable.
Biological Oxygen Demand No information available.
Chemical Oxygen Demand No information available.

12.3 Bioaccumulative Potential

Bioaccumulative Potential Does not bioaccumulate.
Bioacculmation Factor No information available.
Partition Coefficient; n-Octanol/Water No information available.

12.4 Mobility in Soil

Mobility Soluble in water. (Aqueous solutions are acidic.)

12.5 Results of PBT and vPvB Assessment

Results of PBT and vPvB Assessment No information available.

12.6 Other Adverse Effects

Other Adverse Effects No information available.

Name	Acute Toxicity (Fish)	Acute Toxicity (Aquatic Invertebrates)	Acute Toxicity (Aquatic Plants)
Acetic acid	LC50 96 Hours >300.80mg/l Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours >300.80mg/l Daphnia magna	
Benzioc Acid	LC50 96 Hours >100.00ppm Freshwater Fish	EC50 48 Hours >100.00ppm Daphnia magna	
Formic Acid	LC50 96 Hours 130.00ppm Brachydanio rerio (Zebra Fish)	EC50 48 Hours 365.00ppm Daphnia magna	EC50 72 Hours 1.24ppm Selenastrum Capricornutum

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Management When handling waste and waste packaging, consideration should be made to the safety precautions applying to handling of the product.

13.1 Waste Treatment Methods

Disposal Methods Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number

UN No. (ADR) UN2924
UN No. (IMDG) UN2924
UN No. (IATA) UN2924

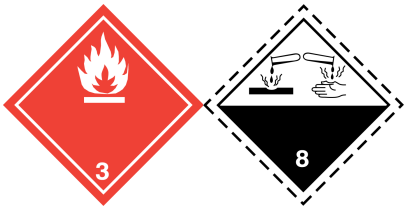
14.2 UN Proper Shipping Name

ADR Proper Shipping Name FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Formic Acid + acetic acid)
IMDG Proper Shipping Name FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Formic Acid + acetic acid)
IATA Proper Shipping Name FLAMMABLE LIQUID, CORROSIVE N.O.S. (Formic Acid + acetic acid)

14.3 Transport Hazard Class(es)

ADR Class 3 +8
IMDG Class 3+ 8
IATA Class 3+8

Transport Labels



14.4 Packing Group

ADR/RID/ADN Packing Group	II
IMDG Packing Group	II
IATA Packing Group	II

14.5 Environmental Hazards

ADR	No
IMDG	No
IATA	No

14.6 Special Precautions for User

EMS	F-E, S-C
Emergency Action Code	A3
Hazard No. (ADR)	338
Tunnel Restriction Code	(D/E)

14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

EU Legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 453/2010 of 20th May 2010 amending regulation (EC) No 1907/2006.
Approved Code of Practice	Workplace Exposure Limits Guidance Note EH40/2005.
Chemical Safety Assessment	No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General Information	This Safety Data Sheet is in accordance with Reach Regulation (EC) No 453/2010.
Revision Comments	This is a first issue.
Revision Date	28/09/2016
Revision	1
Safety Data Sheet Status	Approved.

Hazard Statements In Full

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage
H331	Toxic if inhaled.
H226	Flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H315	Causes skin irritation.
H304	May be fatal if swallowed and enters airways.
H411	Toxic to aquatic life with long lasting effects.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.