



The Hoofcare Experts

SAFETY DATA SHEET

Keratex Hoof Hardener

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

1.1. Product identifier

Product name Keratex Hoof Hardener
SDS number 11332

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

Identified uses A patented hardener for equine hooves.
Uses advised against Any use other than those identified.

1.3. Details of the supplier of the safety data sheet

Supplier Penleigh Irving Ltd./t/a Keratex Hoofcare
25 Fairwood Road
Dilton Marsh
Westbury
Wiltshire
BA13 3SN
Tel: +44 (0)1373 827 649
Fax: +44 (0)1373 827 007
info@keratex.com

1.4. Emergency telephone number

Emergency telephone +44 (0)7969 467 388

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards

Not Classified

Health hazards

Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 2 - H371

Environmental hazards

Not Classified

Classification (67/548/EEC or 1999/45/EC)

Xn;R20/21/22. Carc. Cat. 3;R40. C;R34. Xi;R37. R43.

2.2. Label elements

Pictogram



Signal word

Danger

Hazard statements

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H317 May cause an allergic skin reaction.
 H314 Causes severe skin burns and eye damage.
 H371 May cause damage to organs .
 H351 Suspected of causing cancer.
 H302+H332 Harmful if swallowed or if inhaled.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P261 Avoid breathing vapour/spray.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local regulations.

Contains

ALUMINIUM CHLORIDE, hydrochloric acid, FORMALDEHYDE ...%, METHANOL

Supplementary precautionary statements

P264 Wash contaminated skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P304+P340 IF INHALED: Remove person to fresh air and keep 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.
 P363 Wash contaminated clothing before reuse.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

glycerol	10-30%
CAS number: 56-81-5 EC number: 200-289-5 REACH registration number: 01-2119471987-18-XXXX	
Classification	Classification (67/548/EEC or 1999/45/EC)
Not Classified	-
hydrochloric acid	5-10%
CAS number: — EC number: 231-595-7	
Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Corr. 1B - H314 STOT SE 3 - H335	C;R34 Xi;R37

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FORMALDEHYDE ...%	1-5%
CAS number: 50-00-0 EC number: 200-001-8 REACH registration number: 01-2119488953-20-XXXX	
Classification Skin Corr. 1B - H314 Skin Sens. 1 - H317 Carc. 2 - H351 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 3 - H335	Classification (67/548/EEC or 1999/45/EC) Carc. Cat. 3;R40 T;R23/24/25 C;R34 R43
METHANOL	1-5%
CAS number: 67-56-1 EC number: 200-659-6 REACH registration number: 01-2119433307-44-XXXX	
Classification Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331	Classification (67/548/EEC or 1999/45/EC) F;R11 T;R23/24/25,R39/23/24/25

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments The formulation and application of this product is governed by one or more patents.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Inhalation

Clean nose and mouth with water. If unconscious or breathing is irregular artificial respiration may be administered by suitably qualified first-aiders. If symptoms persist, get medical attention.

Ingestion

Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Keep affected person under observation. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

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

Notes for the doctor

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

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5.2. Special hazards arising from the substance or mixture

Specific hazards

In case of fire, toxic and corrosive gases may be formed. On contact with ordinary metals, ((galvanised) steel, aluminium) corrosion may occur and generate highly flammable hydrogen gas.

Hazardous combustion products

Heating may generate the following products: Toxic and corrosive gases or vapours.

5.3. Advice for firefighters

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

In case of spills, beware of slippery floors and surfaces. Avoid inhalation of vapours and contact with skin and eyes. Use suitable respiratory protection if ventilation is inadequate.

6.2. Environmental precautions

Environmental precautions

Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Packaging must be labeled with a label that states: "Contains a substance covered by the Danish work regulation with respect to cancer risk".

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Provide adequate ventilation. Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

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glycerol

Long-term exposure limit (8-hour TWA): WEL 10 mg/m3

hydrochloric acid

Long-term exposure limit (8-hour TWA): WEL 1 ppm 2 mg/m3

Short-term exposure limit (15-minute): WEL 5 ppm 8 mg/m3

FORMALDEHYDE ...%

Long-term exposure limit (8-hour TWA): WEL 2 ppm 2,5 mg/m3

Short-term exposure limit (15-minute): WEL 2 ppm 2,5 mg/m3

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m3

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m3

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

ALUMINIUM CHLORIDE (CAS: 7446-70-0)

DNEL	Industry - Inhalation; Long term systemic effects: 0.2 mg/m3 Industry - Inhalation; Short term systemic effects: 1 mg/m3 Industry - Inhalation; Long term local effects: 0.2 mg/m3 Industry - Inhalation; Short term local effects: 2 mg/m3
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PNEC	- Fresh water; 25 µg/l - Marine water; 2.5 µg/l - Intermittent release; 74 µg/l - STP; 100 mg/l - Sediment; 3.736 mg/kg
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glycerol (CAS: 56-81-5)

DNEL	Industry - Inhalation; Long term local effects: 56 mg/m3 Consumer - Inhalation; Long term local effects: 33 mg/m3 Consumer - Oral; Long term systemic effects: 229 mg/kg/day
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PNEC	- Fresh water; 885 µg/l - Marine water; 88.5 µg/l - Sediment (Marinewater); 8.85 mg/l - water; 1000 mg/l - Sediment (Freshwater); 3.3 mg/kg - Sediment (Marinewater); 330 µg/kg - Soil; 141 µg/kg
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hydrochloric acid

Ingredient comments

as hydrogen chloride (HCl)

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FORMALDEHYDE ...% (CAS: 50-00-0)

DNEL
 Industry - Inhalation; Long term systemic effects: 9 mg/m³
 Industry - Inhalation; Long term local effects: 0.5 mg/m³
 Industry - Inhalation; Short term local effects: 1 mg/m³
 Industry - Dermal; Long term systemic effects: 240 mg/kg/day
 Industry - Dermal; Long term local effects: 37 mg/kg/day
 Consumer - Inhalation; Long term local effects: 0.1 mg/m³
 Consumer - Dermal; Long term systemic effects: 102 mg/kg/day
 Consumer - Dermal; Long term local effects: 12 µg/cm²
 Consumer - Oral; Long term systemic effects: 4.1 mg/kg/day

PNEC
 - Fresh water; 0.47 mg/l
 - Marine water; 0.47 mg/l
 - Intermittent release; 4.7 mg/l
 - STP; 0.19 mg/l
 - Sediment (Freshwater); 2.44 mg/kg
 - Sediment (Marinewater); 2.44 mg/kg
 - Soil; 0.21 mg/kg

METHANOL (CAS: 67-56-1)

DNEL
 Industry - Inhalation; Long term systemic effects: 260 mg/m³
 Industry - Inhalation; Short term systemic effects: 260 mg/m³
 Industry - Inhalation; Long term local effects: 260 mg/m³
 Industry - Inhalation; Short term local effects: 260 mg/m³
 Industry - Dermal; Long term systemic effects: 40 mg/kg/day
 Industry - Dermal; Short term local effects: 40 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 50 mg/m³
 Consumer - Inhalation; Short term local effects: 50 mg/m³
 Consumer - Dermal; Long term systemic effects: 8 mg/kg/day
 Consumer - Oral; Long term systemic effects: 8 mg/kg/day

PNEC
 - Fresh water; 154 mg/l
 - Marine water; 15.4 mg/l
 - Intermittent release; 1540 mg/l
 - STP; 100 mg/l
 - Sediment (Freshwater); 570.4 mg/kg
 - Soil; 23.5 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Keratex Hoof Hardener

Appearance

Opaque liquid. Liquid.

Colour

White.

Odour

Pungent.

pH

pH (concentrated solution): >7

Initial boiling point and range

100°C.°C @

Flash point

Technically not feasible. Aqueous solution.

Vapour pressure

40 mm Hg @ °C

Solubility(ies)

Miscible with water.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

The following materials may react strongly with the product: Strong acids. Chlorohydrocarbons.

10.2. Chemical stability

Stability

Stable under normal conditions of storage and use. See section 7.

10.3. Possibility of hazardous reactions

Will not occur under normal conditions.

10.4. Conditions to avoid

Avoid freezing.

10.5. Incompatible materials

Materials to avoid

Hydrochloric acid and/or hydrogen chloride containing materials may produce carcinogenic chloromethyl ethers.

10.6. Hazardous decomposition products

Decomposition can lead to the formation of toxic gases or fumes, including carbon monoxide (CO) and carbon dioxide (CO₂). Hydrogen chloride (HCl).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects

No data is available for this preparation, which is classified according to the calculation method of EC Directive 88/379/EEC. and read across to EC Directive 1272/2008 and its subsequent ATPs.

Acute toxicity - oral

ATE oral (mg/kg)

1,899.33523267

Acute toxicity - dermal

ATE dermal (mg/kg)

5698.00569801

Acute toxicity - inhalation

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ATE inhalation (gases ppm)

17094.01709402

ATE inhalation (vapours mg/l)

72.53089964

ATE inhalation (dusts/mists mg/l)

12.21001221

Inhalation

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Ingestion

Harmful if swallowed.

Skin contact

Irritating to skin.

Eye contact

Irritating to eyes.

Route of entry

Inhalation Skin absorption

Target organs

Respiratory system, lungs

SECTION 12: Ecological Information

Ecotoxicity

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Discharge of large quantities may kill fish and other aquatic life due to excessive changes in pH.

12.2. Persistence and degradability

Persistence and degradability

The product contains substances which are not expected to be biodegradable.

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

Mobility

The product is miscible with water. May spread in water systems.

12.5. Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

Keratex Hoof Hardener

UN No. (ADR/RID)	1760
UN No. (IMDG)	1760
UN No. (ICAO)	1760

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CORROSIVE LIQUID, N.O.S. (ALUMINIUM CHLORIDE ANHYDROUS, hydrochloric acid)
Proper shipping name (IMDG)	CORROSIVE LIQUID, N.O.S. (ALUMINIUM CHLORIDE ANHYDROUS, hydrochloric acid)
Proper shipping name (ICAO)	CORROSIVE LIQUID, N.O.S. (ALUMINIUM CHLORIDE ANHYDROUS, hydrochloric acid)
Proper shipping name (ADN)	CORROSIVE LIQUID, N.O.S. (ALUMINIUM CHLORIDE ANHYDROUS, hydrochloric acid)

14.3. Transport hazard class(es)

Not applicable.

ADR/RID class	8
ADR/RID subsidiary risk	
ADR/RID label	8
IMDG class	8
IMDG subsidiary risk	
ICAO class/division	8
ICAO subsidiary risk	
Transport labels	

**14.4. Packing group**

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-A, S-B
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations**

Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 SI No 716. (CHIP4).
 Control of Substances Hazardous to Health Regulations (as amended). (COSHH) Refer to Revised guidance 6th Edition 2013
<http://www.hse.gov.uk/pubns/priced/l5.pdf>

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Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007. (CDG 2009) Management of Health & Safety at Work Regulations 1999.

EU legislation

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) (as amended). 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 (as amended). ADR (L'Accord européen relative au transport international des marchandises dangereuses par route.)

Guidance

Workplace Exposure Limits EH40. CHIP for everyone HSG228. Introduction to Local Exhaust Ventilation HS(G)37. The Control of Substances Hazardous to Health Regulations 2002 (as amended). Approved code of practice and guidance. Fifth Edition 2005. HSE Books, or download at: <http://www.hse.gov.uk/pubns/priced/l15.pdf>

Statutory conditions of use

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments

Classification calculated in accordance with CLP (EC 1272/2008). And translated into the language of this document as of the date below.

Revision date 16/02/2015

Revision 1

Supersedes date 27/01/2015

Risk phrases in full

NC Not classified.

R11 Highly flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R34 Causes burns.

R37 Irritating to respiratory system.

R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

R40 Limited evidence of a carcinogenic effect.

R43 May cause sensitisation by skin contact.

Hazard statements in full

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H370 Causes damage to organs <<Organs>> if inhaled and in contact with skin.

H371 May cause damage to organs .

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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.