



CROSS VETPHARM GROUP

## MATERIAL SAFETY DATA SHEET


According to EC Directive 2001/58/EEC

Prepared: January, 2010

Issue No: 2

1. Identification of the Chemical Substance and company identification	4. First Aid Measures						
<p><b>Product Name:</b> Endofluke 10%</p> <p><b>Synonyms:</b> Endofluke 100 mg/ml Oral Suspension, Endofluke 10, Fasifree 10%.</p> <p><b>Use/ Application:</b> Oral suspension for cattle and sheep.</p> <p><b>Company Undertaking Identification:</b> Cross Vetpharm Group Ltd., Broomhill Road, Tallaght, Dublin 24, Ireland.</p> <p><b>Emergency Telephone Number:</b> +353 1 4515011</p>	<p><b>Eyes:</b> Holding eyelids apart, wash immediately with plenty of eyewash solution or clean water for several minutes. Seek IMMEDIATE medical advice.</p> <p><b>Skin:</b> Using gloves, remove contaminated clothing. Wash off immediately with soap and water.</p> <p><b>Ingestion:</b> If swallowed accidentally, wash out mouth with water. Do not induce vomiting. Administer medicinal charcoal in a large quantity of water. Obtain medical attention if a large dose has been ingested.</p> <p><b>Inhalation:</b> If there is respiratory distress, remove patient to a well ventilated room or fresh air.</p> <p><b>Medical Information:</b> Treat symptomatically. Symptoms may include drowsiness, nausea, abdominal pain, headache, diarrhoea, skin rash. For specialist advice doctors should contact the nearest <b>Poisons Information Centre</b>.</p>						
2. Composition/Information on Ingredients.	5. Fire Fighting Measures						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Ingredient</th> <th style="text-align: left;">CAS No.</th> <th style="text-align: left;">Hazard Classification</th> </tr> </thead> <tbody> <tr> <td>Triclabendazole</td> <td>68786-66-3</td> <td>None</td> </tr> </tbody> </table>	Ingredient	CAS No.	Hazard Classification	Triclabendazole	68786-66-3	None	<p><b>Extinguishing Media:</b> Dry chemical powder, foam or CO<sub>2</sub>. Not classified as flammable. During fire, may emit noxious fumes by reaction with other materials.</p> <p><b>Fire and Explosion Hazards:</b> Oxides of carbon and smoke are likely during a fire.</p> <p><b>Protective Measures and Equipment:</b> Wear self-contained breathing apparatus and appropriate protective clothing. Measures have to be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.</p>
Ingredient	CAS No.	Hazard Classification					
Triclabendazole	68786-66-3	None					
3. Hazards Identification	6. Accidental Release Measures						
<p><b>Human:</b> None if used normally.</p> <p><b>Chronic:</b> None if used normally.</p> <p><b>Environment:</b> Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.</p>	<p><b>Personal Precautions:</b> For large spillages, evacuate area. Wear PVC gloves, PVC boots, resistant overalls and eye/face protection. Avoid personal contact with the product.</p> <p><b>Environmental Precautions:</b> Avoid contamination of surrounding areas, soakaway, water-courses, ground and waste water. Alert competent authorities immediately of any discharges into watercourses, drains or sewers.</p> <p><b>Methods for cleanup/recovery:</b> For large spillages contain spillage with sand, earth or any suitable absorbent or inert material. Transfer to container for disposal. With a reputable waste contractor. For small spillages mop up with cloth and placed in a suitably labelled, closed container to await disposal.</p>						

<p><b>7. Handling and Storage</b></p> <p><b>Handling:</b> Read instructions before use. Do not eat, drink or smoke when using. Avoid contact with eyes or skin. Wear suitable protective clothing. . In addition to the measures taken usually in the chemical works like splashproof filling and measuring equipment (including vapour stripping), further personal protection measures may have to be implemented to avoid possible contact with the product.</p> <p><b>Storage:</b> Store only in closed original containers (between 0 - 30°C). Protect from light and keep out of reach and sight of children.</p> <p><b>Specific use:</b> Use only for the intended purpose.</p>	<p><b>10. Stability and reactivity</b></p> <p><b>Stability:</b> Stable for two years from the date of manufacture when stored unopened below 25°C.</p> <p><b>Conditions to Avoid:</b> No data available.</p> <p><b>Materials to Avoid:</b> No data available.</p> <p><b>Hazardous Decomposition Products:</b> No hazardous decomposition products when handled according to the instructions.</p>
<p><b>8. Exposure Controls / Personal Protection</b></p> <p><b>Engineering Measures:</b> Avoid unnecessary exposure to the product. Practice normal good hygiene.</p> <p><b>Personal Protective Equipment:</b> Avoid contact with eyes and skin. Heavy duty cotton or synthetic fabric working clothes. Goggles or faceshield recommended. Change working clothes daily.</p> <p><b>Respiratory:</b> Do not use concentrate in an enclosed area and avoid breathing the vapour. In case of heavy exposure, wear gas mask.</p> <p><b>Occupational exposure limits:</b> None listed. Low risk.</p>	<p><b>11. Toxicological Information</b></p> <p><b>Inhalation:</b> (triclabendazole technical) Rat LC<sub>50</sub> (4hr) &gt; 500 mgM<sup>-3</sup> (low toxicity)</p> <p><b>Skin Contact:</b> (slight irritant – human, non sensitiser - rabbit) Rat LD<sub>50</sub> = &gt;3000 mgkg<sup>-1</sup>.</p> <p><b>Eye Contact:</b> (slight irritant – rabbit).</p> <p><b>Ingestion:</b> Rat oral LD<sub>50</sub> &gt;5000 mgkg<sup>-1</sup>.</p> <p><b>Carcinogenicity:</b> No data available.</p> <p><b>Chronic:</b> The administration of large doses of triclabendazole technical was associated with benign liver tumours in female mice. No evidence of mutagenic, carcinogenic, teratogenic or reproductive effects were obtained. The relevance to humans of the liver tumour is doubted.</p>
<p><b>9. Physical/Chemical Properties</b></p> <p><b>Appearance:</b> White/cream suspension.</p> <p><b>Physical state:</b> Liquid.</p> <p><b>Odour:</b> None.</p> <p><b>pH:</b> No data available.</p> <p><b>Boiling Point:</b> &gt;90°C.</p> <p><b>Melting Point:</b> No data available.</p> <p><b>Flash Point:</b> &gt; 100°C.</p> <p><b>Flammability / Autoflammability:</b> Non flammable.</p> <p><b>Explosive/Oxidising Properties:</b> Not applicable.</p> <p><b>Vapour Pressure:</b> No data available.</p> <p><b>Relative Density:</b> 1.035-1.060 g/cm<sup>3</sup> (20°C).</p> <p><b>Solubility in Water/Fat:</b> Miscible in water.</p> <p><b>Partition Coefficient:</b> &lt;0.001 (octanol/water).</p>	<p><b>12. Ecological Information</b></p> <p><b>Mobility:</b> No data available.</p> <p><b>Persistence and Degradability:</b> No data available.</p> <p><b>Bioaccumulative potential:</b> No data available.</p> <p><b>Aquatic toxicity:</b> (triclabendazole – highly toxic to fish and daphniae) 96-hr rainbow trout LC<sub>50</sub> = 0.14 mgL<sup>-1</sup>.</p> <p><b>Birds:</b> (triclabendazole – slightly toxic to birds).</p> <p><b>Effect on Effluent Treatment:</b> No data available.</p> <p><b>Other:</b> Marine pollutant</p>

<p><b>13. Disposal Considerations</b></p> <p><b>Product:</b> Pay attention to protective clothing and measures. Cover up product with absorptive material such as sand, soil, diatomaceous earth, etc. Collect material in specially marked, tightly closing containers. Clean dirty areas with carbonated or soapy water. Put washing water in containers too, to avoid any contamination of surface and ground water. Hose down the area for a prolonged period. Heavily contaminated soil has to be dug out down to clean soil. Spilled product cannot be used further and must be disposed of. For large quantities dispose via an authorised disposal contractor.</p> <p><b>Containers:</b> Used containers should be flushed out with plenty of water and disposed of in domestic waste, taking care to avoid spillage or leakage. For large quantities dispose via an authorised disposal contractor.</p> <p><b>Special Environmental Handling Procedures:</b> Do not allow product to reach ground water, water courses, sewage or drainage systems.</p>	<p><b>15. Regulatory Information</b></p> <p><b>Legal Categories:</b></p> <p>An oral suspension for the treatment of liver fluke in cattle and sheep.</p> <p><b>UK: POM-VPS</b> Prescription only Medicine – to be supplied only on veterinary prescription by a veterinary surgeon or suitably qualified person.</p> <p><b>IRL: LM</b> Licensed Merchant, for sale or supply only from a pharmacy, from a premises for which an Animal Remedies Merchant’s Licence relates, or by a registered veterinary surgeon for the treatment of animals under his/her care.</p>
<p><b>14. Transport Information</b></p> <p><b>Packaging (Size &amp; Description):</b> 1 litre and 2.5 litre high-density polyethylene flat bottom backpack containers. The closures used for both pack sizes are 38 mm propylene standard caps with an induction heat seal liner. A 38 mm polypropylene spouted cap is also provided with each pack size for dispensing purposes.</p> <p><b>Transport Classification:</b> Not classified as dangerous.</p> <p><b>Substance ID No:</b> None</p> <p><b>Proper Shipping Name:</b> None</p> <p><b>ICAO/IATA/IMDG Class:</b> Not Classified</p> <p><b>Subsidiary Risk:</b> None</p> <p><b>Packing Group:</b> None</p> <p><b>ADR Class:</b> Not subject to ADR provisions.</p> <p><b>Transport Hazard Symbol:</b> None</p> <p><b>Emergency Action Code:</b> None.</p> <p><b>Other:</b> N/A</p>	<p><b>16. Other Information</b></p> <p><b>R - Safety Phrases: N</b></p>  <p><b>R52/53</b> - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p><b>S - Safety Phrases:</b></p> <p><b>S2</b> - Keep out of reach and sight of children.</p> <p><b>S7/9</b> - Keep container tightly closed in a well ventilated place.</p> <p><b>S13</b> - Keep away from food, drink and animal feeding stuffs.</p> <p><b>S24/25</b> - Avoid contact with eyes and skin.</p> <p><b>S35</b> - the material and its contents must be disposed of in a safe way.</p> <p><b>S37/39</b> - Wear suitable protective gloves and eye/face protection.</p> <p><b>S61</b> - Avoid release into the environment. Refer to instructions on the safety data sheet.</p>
<p><b>Training Instructions:</b> Not Applicable</p>	<p><b>Revisions to the safety data sheet:</b></p> <p><b>Issue 1:</b> Prepared February 2004 to comply with 1991/155/EEC</p> <p><b>Issue 2:</b> Prepared January 2010, to comply with 2001/58/EEC</p>
<p><b>Disclaimer</b></p>	
<p>Cross Vetpharm Group Limited has provided the information and/or recommendations as contained in this Material Safety Data Sheet on the strict basis that the information and/or recommendations are given without warranty, expressed or implied, statutory or otherwise, and no liability shall be accepted for the consequence of any reliance placed thereon.</p> <p>Cross Vetpharm Group Limited has provided the information and/or recommendations as contained in this Material Safety Data Sheet in good faith and in an attempt to be helpful but on the strict basis that no liability shall be accepted by Cross Vetpharm Group Limited, its subsidiaries, shareholders, directors, officers, employees, agents and servants in respect of this matter.</p> <p>A person in receipt of this Material Safety Data Sheet should exercise their own judgement on the information and/or recommendations and should, if necessary, obtain their own independent professional advice at their own expense in relation to the information and/or recommendations contained in this Material Safety Data Sheet.</p>	