1 Identification

- Product identifier
  - Trade name: EQUIOXX® Oral Paste for Horses
    PREVICOX® Oral Paste for Horses

- Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.

- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:
    Merial Limited
    3239 Satellite Blvd.
    Duluth, Ga. 30096-4640
    1-888-MERIAL 1 (1-888-637-4251)

- Emergency telephone number:
  Spill Information:
  CHEMTREC® 1-800-424-9300
  CHEMTREC® International 1+703-527-3887
  International calls 011+703-527-3887
  Reverse charges.

2 Hazard(s) identification

- Classification of the substance or mixture
  The product is not classified according to the Globally Harmonized System (GHS).

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC
  Not applicable.

- Information concerning particular hazards for human and environment:
  The product does not have to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- Classification system:
  The classification was made according to the latest editions of international substances lists, and from company and regulatory data.

- Label elements
  - GHS label elements Void
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void
  - Classification system:
    - NFPA ratings (scale 0 - 4)
      Health = 1
      Fire = 1
      Reactivity = 0
    - HMIS-ratings (scale 0 - 4)
      HEALTH 1 Health = 1
      FIRE 1 Fire = 1
      REACTIVITY 0 Reactivity = 0
Material Safety Data Sheet
ISO/DIS 11014 / 29 CFR 1910.1200 / ANSI Z400.1

Printing date 03/16/2015 Reviewed on 03/16/2015

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- Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Components: Void
- Additional information: For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

- Description of first aid measures
- General information: No special measures required.
- After inhalation: Seek immediate medical advice.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:
  Rinse opened eye for a minimum of 15 minutes under running water. Get medical attention immediately.
- After swallowing:
  Immediately call a doctor.
- Most important symptoms and effects, both acute and delayed
  In case of symptomatic effect provide treatment to maintain life functions.
- Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
- Protective equipment: Self-contained breathing apparatus and full protective equipment.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose of contaminated material as waste according to section 13.
- Reference to other sections: No dangerous substances are released.

7 Handling and storage

- Precautions for safe handling: Keep containers tightly sealed.
- Information about protection against explosions and fires: No special measures required.
8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.

- Control parameters
- Components with limit values that require monitoring at the workplace:
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.

- Exposure controls
- Personal protective equipment:
  General protective and hygienic measures:
  Wash hands before breaks and at the end of work.
  Avoid contact with the eyes and skin.
  Do not eat, drink, smoke or inhale.
  Do not store food in the working area.
- Protection of hands:
  Chemical resistant gloves
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- Material of gloves
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:
  Safety goggles.
- Body protection: Impervious protective clothing

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
  Appearance:
  Form: Smooth, Semi-solid Paste
  Color: White to off-white
  Odor: None
Trade name: EQUIOXX® Oral Paste for Horses
PREVICOX® Oral Paste for Horses

<table>
<thead>
<tr>
<th>· Change in condition</th>
<th>· Melting point/Melting range: Undetermined.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>· Boiling point/Boiling range: Undetermined.</td>
</tr>
<tr>
<td>· Flash point:</td>
<td>· Not determined</td>
</tr>
<tr>
<td>· Auto igniting:</td>
<td>· Product is not self-igniting.</td>
</tr>
<tr>
<td>· Danger of explosion:</td>
<td>· Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>· Vapor pressure:</td>
<td>· Not determined</td>
</tr>
<tr>
<td>· Specific gravity:</td>
<td>· Not determined</td>
</tr>
<tr>
<td>· Solubility in / Miscibility with Water:</td>
<td>· Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>· Viscosity:</td>
<td>· ~40 Cp</td>
</tr>
<tr>
<td>· Organic solvents:</td>
<td>· 0.0 %</td>
</tr>
<tr>
<td>· Other information:</td>
<td>· No further relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and reactivity

· Reactivity
· Chemical stability
· Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
  Avoid exposure to heat, sparks, or flame.
· Possibility of hazardous reactions: No dangerous reactions known.
· Conditions to avoid: No further relevant information available.
· Incompatible materials: May react with strong oxidizers or reducers.
· Hazardous decomposition products:
  Thermal decomposition may release oxides of carbon, small molecular weight hydrocarbons and uncharacterized products.

11 Toxicological information

· Information on toxicological effects
· Acute toxicity:
· LD/LC50 values that are relevant for classification:

<table>
<thead>
<tr>
<th>189954-96-9 Firocoxib</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
</tr>
<tr>
<td>Dermal LD50</td>
</tr>
</tbody>
</table>

· Primary irritant effect:
· on the skin: No irritating effect known.
· on the eye: No irritating effect known.
· Sensitization: No sensitizing effects known.
· Subacute to chronic toxicity:
  In a 90-day oral toxicity study in rats, the NOAEL was 60 mg/kg/day, the highest dose tested. Non-adverse changes in liver, thyroid and kidney were reversible (resolved after treatment).
  In a 6-month study in adult beagle dogs, the NOAEL was 5 mg/kg/day.
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Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations.
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

MUTAGENICITY:
Firocoxib:
Tested negative in bacterial and mammalian genetic toxicity tests with and without metabolic activation. Tests included: Ames Test, mouse lymphoma assay, CHO cell assay and mouse micronucleus assay.

REPRODUCTIVE AND DEVELOPMENTAL EFFECTS:
Firocoxib:
In a one-generation reproductive oral toxicity study in rats, the maternal NOEL was 1 mg/kg/day. The LOEL for reproduction and fetotoxicity was 1 mg/kg/day. In a developmental oral toxicity study in rats, a maternal and developmental NOAEL of 3 mg/kg/day was observed. In rabbits, the maternal toxicity NOEL was 3 mg/kg/day with the NOAEL of 1 mg/kg/day for developmental effects. An acceptable daily intake of 1.7 μg firocoxib/kg body weight is deemed health protective (i.e., negligible risk) in certain human subpopulations (e.g., pregnant women).

Carcinogenic categories

- IARC (International Agency for Research on Cancer)
  None of the ingredients is listed.

- NTP (National Toxicology Program)
  None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.

Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
  - Ecotoxicological effects:
  - Remark:
  For Firocoxib:
  Daphnia test, 48 hr: EC50 > saturation limit (32.5 mg/l)
  Algae test, 72 hr: IC50 = 11 mg/l
  - Additional ecological information:
    - General notes: Not known to be hazardous to water.
    - Results of PBT and vPvB assessment
      - PBT: Not applicable.
      - vPvB: Not applicable.
    - Other adverse effects: No further relevant information available.

Disposal considerations

- Waste treatment methods
  - Recommendation: Disposal must be made according to official regulations.
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- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number: None
- UN proper shipping name: None
- Transport hazard class(es): None
- Packing group: None
- Environmental hazards:
  - Marine pollutant: No
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA
  - Section 355 (extremely hazardous substances):
    None of the ingredients are listed.
  - Section 313 (Specific toxic chemical listings):
    None of the ingredients are listed.
- TSCA (Toxic Substances Control Act):
  None of the ingredients are listed.
- CA Proposition 65
  - Chemicals known to cause cancer:
    None of the ingredients are listed.
  - Chemicals known to cause reproductive toxicity for females:
    None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for males:
    None of the ingredients is listed.
  - Chemicals known to cause developmental toxicity:
    None of the ingredients is listed.
- Carcinogenesis potential categories
  - EPA (Environmental Protection Agency)
    None of the ingredients is listed.
- TLV (Threshold Limit Value established by ACGIH)
  None of the ingredients is listed.
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- MAK (German Maximum Workplace Concentration)
  None of the ingredients is listed.

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  None of the ingredients is listed.

- GHS label elements: Void
- Hazard pictograms: Void
- Signal word: Void
- Hazard statements: Void
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Contact: MSDS Coordinator, msds@merial.com
- Date of preparation / last revision: 03/16/2015 / -

Abbreviations and acronyms:
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

USA