	Material Safety Data Sheet - MSDS		UNIT: CRAVINHOS
	MASTIFIN VACA SECA/ MASTIFIN DRY COW		BUILDING: H
	OPERATION: SECURITY		DIVISION OF SEMI-SOLID FORMS
	DOC Nº: FI-SEG-GE-064		
REV. Nº: 01	VERSION DATE: MAY 13, 2008		AREA: PRODUCTION
	REVISION DATE: SEPT 24, 2008		
DOCUMENT VALIDITY: INDETERMINATE		PREVIOUS DOCUMENT: NOT NUMBERED	

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1 – Product and company identification

Product Name: MASTIFIN VACA SECA/ MASTIFIN DRY COW

Supplier

Name: OURO FINO SAÚDE ANIMAL
Address: Rodovia Anhanguera, SP 330, km 298 - Distrito Industrial
 Cravinhos / SP – Brasil
Telephone number: 55 16 3518-2000

2 – Composition / Information on ingredients

PREPARATION

Paste.

Chemical nature: Aminoglycosides (Gentamicin sulfate).

Class: Antibiotic (Gentamicin sulfate). Veterinary use.

Components contributing to the hazard:

Components	CAS	Concentration
Gentamicin sulfate	1405-41-0	6.77%

3 – Hazards identification

Most important hazards: The product may cause renal failure, ototoxicity and hypersensitivity reaction.

Specific hazards: When heated to decomposition, it may emit irritant and toxic fumes.

Main symptoms: The product can cause renal failure and also ototoxicity, manifested by problems of hearing, drowsiness and dizziness. In case of ingestion can cause nausea, vomiting and diarrhea. May cause hypersensitivity reactions.

4 – First-aid measures


Inhalation: Remove to fresh air. Get medical attention.

Skin contact: Remove contaminated clothes and shoes. Wash exposed skin with plenty of water and soap. If irritation occurs, get medical attention.

Eye contact: First check the victim for contact lenses and remove if present. Irrigate exposed eyes with copious amounts of room temperature water for at least 15 minutes, hold eyelid open while flushing. If irritation occurs, get medical attention.

Ingestion: Do not induce emesis. Wash the mouth with plenty of water. Never give anything by mouth to an unconscious person. In case of emesis, keep the head below of the level of the hips or in lateral position, if the individual will be lying, to prevent aspiration of the gastric content. Seek medical attention.

Notes to a physician: Life supportive procedures and symptomatic treatment. There are no specific antidotes. Ingestions of large amounts of the product may be treated with activated charcoal and cathartic (within 1 hour after large ingestions).

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5 – Fire-fighting measures

Suitable extinguishing media:	Use any extinguishing media which is suitable for the surrounding fire. Cool fire exposed containers with water.
Specific hazards:	When heated to decomposition, it may emit irritant and toxic fumes.
Protection of firefighters:	Wear full protective clothing and self-contained breathing apparatus.

6 – Accidental release measures

Personal precautions:	Store away from all sources of ignition. Use personal protective equipment (PPE). Avoid contact with the product. Do not handle broken packages unless wearing appropriate personal protective equipment.
Environmental precautions:	In case of spill or leak, contain spill immediately and remove all sources of ignition. Do not allow spill to enter sewers or watercourses.
Clean up methods:	Use PPE. Isolate spill or leak area. Collect material in specially market, tightly closing containers. Wash area with plenty of water and soap. Contain all runoff to prevent environmental contamination. Spilled product cannot be used further and must be disposed of. Contact the manufacturer. Soil: Remove contaminated soil until achieving uncontaminated soil and conduct in accordance with information above.

7 – Handling and storage

Handling


Technical measures:	Use personal protective equipment (PPE). Handle respecting the general rules of safety and industrial hygiene.
Precautions:	Avoid contact with skin, eye and mucous membrane. Keep out of reach of children and domestic animals.

Storage

Technical measures:	Store the temperature of 5°C to 30°C. Store the product in closed original containers.
Storage conditions:	Store in a cool, dry and well ventilated place and protect from direct sunlight.
Incompatible products:	Strong oxidizing agents.
Recommended packaging materials:	Plastic syringe low-density polyethylene (LDPE).

8 – Exposure control / Personal protection

Engineering measures:	Provide local ventilation when manufacturing product.
Control parameters	
Occupational Exposure Limits:	Not established by ACGIH (2007).
Personal protective equipment	
Respiratory protection:	Face mask.
Hand protection:	Impermeable gloves.
Eye protection:	Safety glasses.
Skin and body protection:	Protective clothing and boots.
Hygiene measures:	Do not eat, drink or smoke during handling this material. Clean hands and face at work intervals and after work. Shower and change clothing

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at the end of the workday.

9 – Physical and chemical properties

Physical State:	Semi-solid (paste).
Color:	Yellow.
Odor:	Characteristic.
pH:	Not determined.
Melting point:	Not determined.
Flash point:	Not determined.
Explosion properties:	Not determined.
Density:	Not determined.
Solubility:	Gentamicin sulfate: Freely soluble in water, practically insoluble in alcohol, acetone, chloroform, and ether (PARFITT, 1999).

10 – Stability and reactivity

Stability:	Stable under standard conditions.
Hazardous reactions:	Hazardous reactions will not occur if stored and handled correctly.
Material to avoid:	Strong oxidizing agents.
Hazardous decomposition products:	Nitrogen oxides, sulphur oxides, carbon monoxide, carbon dioxide.

11 – Toxicological information

Acute toxicity:	Gentamicin sulfate: LD ₅₀ oral (mouse) > 9050 mg/kg b.w. (O' NEIL et al, 2001).
Local effects:	There are no data regarding the local effects of this product in experimental animals.
Specific effects:	Concurrent use of other nephrotoxic drugs, including other aminoglycosides, vancomycin, some of cephalosporins, cyclosporin, and cisplatin, amphotericin B or potentially ototoxic drugs such as ethacrynic acid, and perhaps frusemide, may increase the risk of aminoglycoside toxicity. Gentamicin is inactivated when used with carbenicillin. The neuromuscular blockage produced by skeletal muscle relaxants can be potentiated by the aminoglycosides.

12 – Ecological information


Environmental effects:	There are no data regarding the environmental effects of this product.
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13 – Disposal considerations

Product and waste disposal methods:	Disposal should be in accordance with local, state or national legislation.
Packaging:	Do not reuse empty packing. The inadequate destination of the empty packing and waste of products in the environment cause contamination of the soil, water and air, harming fauna, flora and the health of the people.

14 – Transport information

Road (Brazil)	Not dangerous goods.
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**Brazilian Legislation (Decreto n°. 96.044 de 18 de maio de 1988. Resolução n° 420 de 12 de fevereiro de 2004).*

Sea Not dangerous goods.
**IMDG Code 2006 (IMO – International Maritime Organization).*

Air Not dangerous goods.
**DGR IATA 49th Edition, 2008 (Dangerous Goods Regulations – International Air Transport Association).*

15 – Regulatory information

This Material Safety Data Sheet (MSDS) was prepared in accordance with ISO 11014-1.

16 – Other information

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties. It is the user's responsibility to ensure that its activities comply with Federal, State and Local laws.

Literature reference: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH). **Limites de Exposição (TLVs[®]) para Substâncias Químicas e Agentes Físicos & Índices Biológicos de Exposição (BEIs[®])**. São Paulo: [s.n.], 2007.
Translation: Associação Brasileira de Higienistas Ocupacionais (ABHO).

Database PLANITOX – The Science-based Toxicology Company.

O' NEIL, M. J.; SMITH, A.; HECKELMAN, P. E.; OBENCHAIN JR, J. R.; GALLIPEAU, J. A. R.; D' ARECCA, M. A. (Eds.). **The Merck Index: an encyclopedia of chemicals, drugs and biologicals**. 13th ed. Whitehouse Station: Merck & Co., Inc., 2001.

OURO FINO SAÚDE ANIMAL. **Especificação Técnica:** Mastifin Vaca Seca. Cravinhos, SP, 2006. N° Doc. ET-P&D-EPA-037. Unpublished. Document assigned by Ouro Fino Saúde Animal Company.

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Abbreviations:

- b.w.** - body weight.
- CAS** - Chemical Abstract Service.
- LD₅₀** – Administered dose resulting in death to 50% of experimental Animals.
- PPE** - Personal protective equipment.