SAFETY DATA SHEETS

This SDS packet was issued with item:

078827941

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078340405 078464803

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078344645 078827933 078885200 078885218



Printing date 03/31/2008	Reviewed on 03/31/2008
1 Identification of substance	
· Product details	
• Trade name: <u>Rabies Vaccine, Killed Virus</u> <u>IMRAB® Large Animal</u>	
• Item number: 2313, 2313B	
· Manufacturer/Supplier: Merial Limited 3239 Satellite Blvd. Duluth, Ga. 30096-4640 1-888-MERIAL 1 (1-888-637-4251)	
 Information department: MSDS Coordinator Emergency information: Spill Information: CHEMTREC® 1-800-424-9300 CHEMTREC® International 1+703-527-3887 International calls 011+703-527-3887 Reverse charges. 	

2 Composition/Data on components

· Chemical characterization

· Description: Mixture: consisting of the following components.

· Components:

Non hazardous substance

54-64-8 Thimerosal

· Vaccine components This product is a vaccine (biological) for use in cattle.

3 Hazards identification

- · Hazard description: Not applicable.
- · Classification system:

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

· NFPA ratings (scale 0 - 4)

Health = 0Fire = 0Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH 0 Health = 0

FIRE 0 Fire = 0**REACTIVITY O** *Reactivity* = 0 99.9%

>0.1%

USA

Page 1/5

Printing date 03/31/2008

Reviewed on 03/31/2008

Trade name: Rabies Vaccine, Killed Virus IMRAB® Large Animal

4 First aid measures

- · General information: No special measures required.
- After inhalation: Not an expected route of entry.
- · 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.

5 Fire fighting measures

- Suitable extinguishing agents: Use water spray or all purpose dry chemical.
- · Protective equipment:
- Fire fighters should wear self-contained breathing apparatus and full protective equipment.

6 Accidental release measures

· Person-related safety precautions: Not required.

- Measures for environmental protection: Do not allow product to reach sewage system or any water course.
- Measures for cleaning/collecting:
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 - To clean spills or contamination use 1:30 dilution of household bleach.
- Dispose of contaminated material as waste according to section 13. • Additional information: No dangerous substances are released.

7 Handling and storage

- · Handling:
- · Information for safe handling:
- Store in cool, dry place in tightly closed containers. Handle with care. Avoid jolting and impact.
- Information about protection against explosions and fires: No special measures required.
- · Storage:
- Requirements to be met by storerooms and receptacles: Store only in the original container.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Store in a cool, dry, well ventilated place.
- · Recommended storage temperature:

-196 °C

CAUTION: Liquid Nitrogen may create an ASPHYXIATION HAZARD. Ensure adequate ventilation of liquid nitrogen container to prevent accumulation of nitrogen gas.

8 Exposure controls and personal protection

· Components with limit values that require monitoring at the workplace:

54-64-8 Thimerosal

NIOSH REL See Mercury, Aryl

USA –

Printing date 03/31/2008

Reviewed on 03/31/2008

Trade name: Rabies Vaccine, Killed Virus IMRAB® Large Animal

- · 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.
- Breathing equipment: Not required for this formulation when used in accordance with directions.
- · Protection of hands: Not required under normal conditions of use.
- · Eye protection:



Safety goggles.

9 Physical and chemical properties

· General Information	
Form:	Liquid
Color:	Pink to red
Odor:	Slight or no odor
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
• Specific gravity:	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Solvent content:	0%

10 Stability and reactivity

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- · Dangerous reactions No dangerous reactions known.
- · Dangerous products of decomposition: No dangerous decomposition products known.

11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritating effect known.
- \cdot on the eye: No irritating effect known.
- Sensitization: No sensitizing effects known.

USA

USA

Material Safety Data Sheet ISO/DIS 11014 / 29 CFR 1910.1200 / ANSI Z400.1

Printing date 03/31/2008

Reviewed on 03/31/2008

Trade name: Rabies Vaccine, Killed Virus IMRAB® Large Animal

· 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.

12 Ecological information

· General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

· Product:

- Recommendation: Incinerate in an EPA approved facility for the incineration of mercury.
- Waste disposal key: D009 Waste MEDICINE, LIQUID, TOXIC, 6.1, UN1851, PGIII (Vaccines with thimerosal)
- · Uncleaned packagings:
- · Recommendation: Incinerate in an EPA approved facility for the incineration of mercury.
- Recommended cleansing agent: To clean spills or contamination use 1:30 dilution of household bleach.

14 Transport information

· DOT regulations:

· Hazard class:

· Land transport ADR/RID (cross-border): · ADR/RID class: -

- · Maritime transport IMDG:
- · IMDG Class:
- Marine pollutant: No
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class: -

15 Regulations

· 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):

54-64-8 Thimerosal

Printing date 03/31/2008

· CA Proposition 65

Reviewed on 03/31/2008

Trade name: Rabies Vaccine, Killed Virus IMRAB® Large Animal

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

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· 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.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Product related hazard informations:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

· Safety phrases:

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point

• Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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.

- · Department issuing MSDS: MSDS Coordinator
- · Contact: MSDS Coordinator, msds@merial.com

USA