

SAFETY DATA SHEET

Nobilis[®] Rismavac + CA126

Section 1: Identification of the Substance and Supplier

Product name	Nobilis Rismavac + CA126 [Stored in liquid nitrogen]
Recommended use	Vaccine for Veterinary use in Poultry.
Company details	MSD Animal Health, 33 Whakatiki Street, Upper Hutt Phone: 0800 800 543 Fax: 0800 808 100 Website: www.msd-animal-health.co.nz Hours: 8 am – 5 pm, Mon – Fri
Emergency telephone	0800 764 766 (0800 POISON) 24 hours human health 0800 243 622 (0800 CHEMCALL) 24 hours
Date of preparation	September 2011

Section 2: Hazards Identification

VACCINE ONLY

Hazard classifications	9.3C
Priority identifiers	WARNING - Ecotoxic
Secondary identifier	9.3C Harmful to terrestrial vertebrates

Section 3: Composition/Information on Ingredients

Chemical name	CAS number	Concentration
VACCINE		
Chicken Herpes Virus Strain CV1988 (live)	-	$\geq 3.0 \log_{10}$ TCID ₅₀ per bird dose of cell associated virus
Turkey Herpes Virus strain FC 126 (living)	-	$\geq 3.0 \log_{10}$ TCID ₅₀ per bird dose of cell associated virus
Dimethyl Sulfoxide	67 – 68 – 5	7.5%
LIQUID NITROGEN		
Non-hazardous as it does not trigger any of the minimum degrees of hazard under the HSNO Act 1996.	7727-37-9	Not specified

Section 4: First Aid Measures

Necessary first aid measures

INHALATION Risk of asphyxiation due to nitrogen gas

1. Remove the patient from the area taking care that the rescuers do not become victims. If the patient is unconscious but still breathing place them in a recovery position and keep warm. Keep the patient under observation until full consciousness has returned. Seek medical attention.
2. If breathing has stopped but the heart is still beating give mouth to mouth resuscitation immediately. As a simple asphyxiant, nitrogen gas is non-toxic and mouth to mouth resuscitation is safe. Continue until the patient is able to breath unassisted then place in the recovery position and seek medical attention.
3. If breathing and the heart has stopped apply mouth to mouth resuscitation

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and cardiac massage immediately. Note the time the patient was found. People have been successfully resuscitated after prolonged periods so continue with resuscitation procedures until medical help has arrived.

SKIN CONTACT

Of liquid nitrogen - Frost bite injuries – Warm the affected part by immersion in tepid water (28-30%) or use body heat. There will be considerable pain during warming. Reassure the patient that this is normal. Do not rub the affected area. Seek medical advice if full function and feelings are not rapidly restored.

Of the vaccine - In case of skin contact, while wearing protective gloves, carefully remove any contaminated clothing, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a doctor.

ACCIDENTAL SELF-INJECTION Of the vaccine - Self injection – encourage bleeding before disinfecting and dressing the injury. This also applies to cuts from exploding ampoules.

EYE CONTACT Of the vaccine - In case of eye contact, immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a doctor.

INGESTION Of vaccine - Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or National Poisons Centre. If symptoms persist, consult a doctor.

Required instructions	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor.
Notes for medical personnel	Accidental self-injection of vaccine: The virus is not known to replicate in mammalian cells therefore no complications are anticipated from self injection injuries. Treat symptomatically. Some risk of hypersensitivity from injection. Contamination of the needle must be considered.
Workplace facilities	Emergency showers and eyewashes may be warranted depending on quantity and type of use.

Section 5: Fire Fighting Measures

Type of hazard	Not classified as flammable
Fire hazard properties	Containers may explode when heated – ruptured cylinders may rocket.
Regulatory requirements	Not applicable
Extinguishing media and methods	<ul style="list-style-type: none"> • Use extinguishing agent suitable for surrounding fire • If safe to do so, move undamaged containers from fire area. • Cool container by directing flooding quantities of water onto upper surface until well after fire is out. • Damaged containers should only be handled following expert advice.
Hazchem code	2RE (liquid nitrogen)
Recommended protective clothing	Wear Liquid-Tight Chemical Protective Suit with self-contained breathing apparatus (SCBA). Always wear thermal protective equipment when handling cryogenic liquids and associated equipment.

Section 6: Accidental Release Measures

Emergency procedures	<ul style="list-style-type: none">• Do not walk touch or walk through spilled material.• Stop leak if safe to do so – If possible, turn leaking Dewar so that the gas escapes rather than liquid.• Prevent entry to waterways, drains or confined areas• Use fine spray, fog or vapour-suppressing foam to knock down vapours or divert vapour clouds – Do not direct water at spill or source of leak.• Allow substance to evaporate – ventilate the area.
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Section 7: Handling and Storage

Precautions for safe handling	<p>Warning - leaking ampoules may explode spontaneously on removal from liquid nitrogen.</p> <p>In a confined or poorly ventilated area, nitrogen gas escaping from the canister may significantly reduce the oxygen level in the atmosphere creating the risk of asphyxiation. In such storage facilities an oxygen meter must be fitted and set to alarm at a level of 18% oxygen.</p> <p>A risk of eye injury or abrasion from exploding ampoules. Liquid nitrogen splashes may result in frost bite or cold burns. It is also a simple asphyxiant; as the gas boils off it may replace oxygen in the atmosphere.</p> <p>Protective clothing must always be worn when handling this product. Avoid contact with skin, eyes, and mucosa. Keep containers adequately sealed during material transfer, transport, or when not in use. See Section 8 (Exposure Controls) for additional guidance.</p>
Regulatory requirements	Signage required for vaccines, where quantities greater than 10,000L are present.
Handling practices	Avoid contact with skin. Keep containers adequately sealed and in upright position during material transfer, transport, or when not in use. (see above for additional information)
Approved handlers	Not required.
Conditions for safe storage	Do not store Dewar in wet, dirty areas. Moisture, animal waste, chemicals, strong cleaning agents and other substances which could promote corrosion should be removed promptly. Use water or mild detergent for cleaning and dry the surface thoroughly. Do not use strong alkaline or acid cleaners that could damage the finish and corrode the metal shell.
Store site requirements	Store ampoules in liquid nitrogen at the temperature below -150°C. Maintain nitrogen level. Store liquid nitrogen Dewar in upright position in a cool, dry well ventilated area, away from incubator intakes and chicken boxes. Do not drop.
Packaging	Schedule 4 (Vaccine ampoules only)

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Section 8: Exposure Control/Personal Protection

Workplace exposure standards	No WES is set for either substance.
Application in the workplace	Ensure adequate ventilation. Keep container sealed when not in use. (See handling and storage above)The oxygen content of air should be maintained at or above 19.5% by volume under normal atmospheric pressure.
Exposure standards outside the workplace	No TEL or EEL is set for this substance at this time
Personal protection	Removal of ampoules from liquid nitrogen: Wear a full face visor or shield and thick, insulated and long gloves. Protective clothing with long sleeves. Dilution of vaccine: Single use medical gloves to be worn.

Section 9: Physical and Chemical Properties

Appearance	Deep frozen yellow liquid in a sealed glass ampoule in liquid nitrogen
Boiling Point	Approximately 100°C
Melting/Softening point	Not applicable
Vapour Pressure	2.37 kPa at 20°C (water vapour pressure)
Specific Gravity	Not available
Solubility (H ₂ O)	Completely soluble in water
Percent Volatiles	Not determined
Evaporation Rate	Not determined

Section 10: Stability and Reactivity

Stability of the substance	Liquid nitrogen is stable during transport. Reactive with water – heat of water will vigorously vaporise liquid nitrogen.
Conditions to avoid	Avoid high temperatures
Material to avoid	Avoid food products
Hazardous decomposition products	No dangerous decomposition is expected if used according to manufacturer's specifications.

Section 11: Toxicological Information
Acute effects for individual ingredients only

TEL	No TEL is set for this substance at this time.
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Chronic/long term effects for individual ingredients only

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Section 12: Environmental Information

Effects for individual ingredients only.

TERRESTRIAL VERTEBRATES	Dimethyl sulfoxide: LD50 100mg/kg bw (other avian) [ERMA]
EEL	No EEL is set for this substance at this time.

Section 13: Disposal Considerations

Disposal information

Disposal

Unused vials should be autoclaved, boiled or incineration before discarding. Avoid contamination of any water source or the environment with product.

Container Disposal

Discarded vials, containers and needles should be placed in a designated, labelled biologicals container. If not available bury in suitable landfill. Return Dewar to MSD.

Section 14: Transport Information

Relevant information

Classified: UN 1977 NITROGEN, REFRIGERATED LIQUID for transport
Class: 2.2 Non-flammable, non-toxic gases
Hazchem code: 2RE
Initial Emergency Response: 08

Refer to Haznote.

Section 15: Regulatory Information

Regulatory status

HSNO Approval Code: HSR002367.
For a full listing of controls see www.epa.govt.nz

ACVM registration number: A007468.
For conditions of registration see www.foodsafety.govt.nz

HSNO and ACVM controls

Signage: 10,000 Litres (Vaccine)

Section 16: Other Information

Additional information

Nobilis is a registered trademark.

While information provided on this SDS includes Hazardous Information relating to Liquid Nitrogen – we cannot guarantee the completeness of the data. We urge users to refer to the Liquid Nitrogen supplier's SDS for full information.

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