

RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: Wed 5 - Mar - 2008

CHEMWATCH 4614-30

CD 2004/3 Page 1 of 11

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

RANVET BATPHOL VITAMIN B COMPLEX

SYNONYMS

Choline Injection For Horses

PRODUCT USE

Prevention and treatment of Vitamin B Complex and Choline deficiencies in horses.

SUPPLIER

Company: Ranvet Pty Ltd (ACN: 001 606 033)
Address:
10-12 Green Street
East Botany
NSW, 2019
AUS
Telephone: +61 2 9666 1744
Emergency Tel: +61 418 493 533 A/H
Fax: 02 9666 1755

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

Not considered a dangerous substance according to directive 67/548/EEC, point 4; and not hazardous according to OSHA 29 CFR 1910.1200 (USA).

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

According to the Criteria of NOHSC, and the ADG Code.

POISONS SCHEDULE

None

RISK

SAFETY

Do not breathe gas/fumes/vapour/spray.
Avoid contact with skin.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
thiamine hydrochloride	67-03-8	4.5-6.5
niacinamide	98-92-0	4.5-5.5

continued...

RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: 5-Mar-2008

CHEMWATCH 4614-30

CD 2004/3 Page 2 of 11

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS ...

d-panthenol	81-13-0	1.8-2.2
pyridoxine hydrochloride	58-56-0	0.9-1.1
choline chloride	67-48-1	0.4-0.5
riboflavine 5'-monophosphate sodium salt dihydrate	130-40-5	0.1-0.2
performance additives nonhazardous		<1
water	7732-18-5	>60

Section 4 - FIRST AID MEASURES

SWALLOWED

For advice, contact a Poisons Information Centre or a doctor.

EYE

If this product comes in contact with eyes:

- Wash out immediately with water.
- If irritation continues, seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

NOTES TO PHYSICIAN

Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances.

In such an event consider:

- foam
- dry chemical powder
- carbon dioxide

continued...

RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: 5- Mar - 2008

CHEMWATCH 4614-30

CD 2004/3 Page 3 of 11

Section 5 - FIRE FIGHTING MEASURES ...

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use fire fighting procedures suitable for surrounding area.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

FIRE/EXPLOSION HAZARD

- Non combustible.
 - Not considered to be a significant fire risk.
 - Expansion or decomposition on heating may lead to violent rupture of containers.
 - Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).
 - May emit acrid smoke.
- Decomposition may produce toxic fumes of , carbon dioxide (CO₂) , nitrogen oxides (NO_x) , other pyrolysis products typical of burning organic material.
May emit poisonous fumes.
May emit corrosive fumes.

FIRE INCOMPATIBILITY

Avoid contamination with strong oxidising agents as ignition may result

HAZCHEM

None

Personal Protective Equipment

PERSONAL PROTECTION EQUIPMENT
Breathing apparatus.
Gas tight chemical resistant suit.

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable labelled container for waste disposal.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

continued...

RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: 5 - Mar - 2008

CHEMWATCH 4614-30

CD 2004/3 Page 4 of 11

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- When handling DO NOT eat, drink or smoke.
- Always wash hands with soap and water after handling.
- Avoid physical damage to containers.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.

SUITABLE CONTAINER

Ampoule. Vial.

STORAGE INCOMPATIBILITY

Avoid reaction with oxidising agents

STORAGE REQUIREMENTS

- Store in original containers.
 - Keep containers securely sealed.
 - Store in a cool, dry, well-ventilated area.
 - Store away from incompatible materials and foodstuff containers.
 - Protect containers against physical damage and check regularly for leaks.
 - Observe manufacturer's storing and handling recommendations.
- Store below 25 degC.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

INGREDIENT DATA

THIAMINE HYDROCHLORIDE:

For each of the following

NIACINAMIDE:

RIBOFLAVINE 5'-MONOPHOSPHATE SODIUM SALT DIHYDRATE:

TLV TWA: 10 mg/m³ (Value for particulate matter containing no asbestos and <1% crystalline silica, Inhalable fraction) [ACGIH]

TLV TWA: 3 mg/m³ (Value for particulate matter containing no asbestos and <1% crystalline silica, Respirable fraction) [ACGIH]

Dusts not otherwise classified, as inspirable dust;

ES TWA: 10 mg/m³.

Particulate (insoluble or poorly soluble *) Not Otherwise Specified (P.N.O.C)

TLV TWA: 10 mg/m³ Inhalable particulate

TLV TWA: 3 mg/m³ Respirable particulate

continued...

RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: 5 - Mar - 2008

CHEMWATCH 4614-30

CD 2004/3 Page 5 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

OEL-Sweden, United Kingdom: 10 mg/m³ total dust, 5 mg/m³ respirable dust

These "dusts" have little adverse effect on the lungs and do not produce toxic effects or organic disease. Although there is no dust which does not evoke some cellular response at sufficiently high concentrations, the cellular response caused by P.N.O.C.s has the following characteristics:

- the architecture of the air spaces remain intact,
- scar tissue (collagen) is not synthesised to any degree,
- tissue reaction is potentially reversible.

Extensive concentrations of P.N.O.C.s may:

- seriously reduce visibility,
- cause unpleasant deposits in the eyes, ears and nasal passages,
- contribute to skin or mucous membrane injury by chemical or mechanical action, per se, or by the rigorous skin cleansing procedures necessary for their removal. [ACGIH]

This limit does not apply:

- to brief exposures to higher concentrations
- nor does it apply to those substances that may cause physiological impairment at lower concentrations but for which a TLV has as yet to be determined.

This exposure standard applies to particles which

- are insoluble or poorly soluble* in water or, preferably, in aqueous lung fluid (if data is available) and
- have a low toxicity (i.e.. are not cytotoxic, genotoxic, or otherwise chemically reactive with lung tissue, and do not emit ionizing radiation, cause immune sensitization, or cause toxic effects other than by inflammation or by a mechanism of lung overload)

* Notice of intended change

For each of the following

D-PANTHENOL:

WATER:

No exposure limits set by NOHSC or ACGIH

PYRIDOXINE HYDROCHLORIDE:

TLV TWA: 10 mg/m³ (Value for particulate matter containing no asbestos and <1% crystalline silica, Inhalable fraction) [ACGIH]

TLV TWA: 3 mg/m³ (Value for particulate matter containing no asbestos and <1% crystalline silica, Respirable fraction) [ACGIH]

Dusts not otherwise classified, as inspirable dust;

ES TWA: 10 mg/m³.

Particulate (insoluble or poorly soluble *) Not Otherwise Specified (P.N.O.C)

TLV TWA: 10 mg/m³ Inhalable particulate

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continued...

RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: 5 - Mar - 2008

CHEMWATCH 4614-30

CD 2004/3 Page 6 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

· contribute to skin or mucous membrane injury by chemical or mechanical action, per se, or by the rigorous skin cleansing procedures necessary for their removal. [ACGIH]

This limit does not apply:

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- have a low toxicity (i.e.. are not cytotoxic, genotoxic, or otherwise chemically reactive with lung tissue, and do not emit ionizing radiation, cause immune sensitization, or cause toxic effects other than by inflammation or by a mechanism of lung overload)

* Notice of intended change

CHOLINE CHLORIDE:

CEL TWA: 0.04 mg/m³

[Russian OEL STEL: 0.2 mg/m³]

PERSONAL PROTECTION

EYE

- Safety glasses with side shields
- Chemical goggles.
- Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

HANDS/FEET

Wear general protective gloves, eg. light weight rubber gloves.

OTHER

No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls.
- Barrier cream.
- Eyewash unit.

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computer-generated selection:

Substance

water		
BUT	YL	A
NEOPRE	NE	A
VIT	ON	A
P	VA	C
NATURAL RUBB	ER	C

continued...

RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: 5 - Mar - 2008

CHEMWATCH 4614-30

CD 2004/3 Page 7 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

RESPIRATOR

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Breathing Zone Level ppm (volume)	Maximum Protection Factor	Half-face Respirator	Full-Face Respirator
1000	10	-AUS	-
1000	50	-	-AUS
5000	50	Airline *	-
5000	100	-	-2
10000	100	-	-3
	100+		Airline**

* - Continuous Flow ** - Continuous-flow or positive pressure demand

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

ENGINEERING CONTROLS

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Yellow / orange clear water-thin liquid; mixes with water.

PHYSICAL PROPERTIES

Liquid.
Mixes with water.

Molecular Weight: Not Applicable
Melting Range (°C): Not Available
Solubility in water (g/L): Miscible
pH (1% solution): Not Available

Boiling Range (°C): Not Available
Specific Gravity (water=1): 1.03-1.04
pH (as supplied): Not Available
Vapour Pressure (kPa): Not Available

continued...

RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: 5 - Mar - 2008

CHEMWATCH 4614-30

CD 2004/3 Page 8 of 11

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES ...

Volatile Component (%vol): Not Available
Relative Vapour Density (air=1): Not Available
Lower Explosive Limit (%): Not Applicable
Autoignition Temp (°C): Not Applicable
State: Liquid

Evaporation Rate: Not Available
Flash Point (°C): Not Applicable
Upper Explosive Limit (%): Not Applicable
Decomposition Temp (°C): Not Available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

EYE

Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

INHALED

Not normally a hazard due to non-volatile nature of product

continued...

RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: 5 - Mar - 2008

CHEMWATCH 4614-30

CD 2004/3 Page 9 of 11

Section 11 - TOXICOLOGICAL INFORMATION ...

CHRONIC HEALTH EFFECTS

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There exists limited evidence that shows that skin contact with the material is capable either of inducing a sensitisation reaction in a significant number of individuals, and/or of producing positive response in experimental animals. Exposure to small quantities may induce hypersensitivity reactions characterised by acute bronchospasm, hives (urticaria), deep dermal wheals (angioneurotic oedema), running nose (rhinitis) and blurred vision. Anaphylactic shock and skin rash (non-thrombocytopenic purpura) may occur. An individual may be predisposed to such antibody mediated reaction if other chemical agents have caused prior sensitisation (cross-sensitivity). Clinical symptoms and signs of intoxication following occupational exposure to pyridine, its homologues and derivatives include gastrointestinal disturbance with diarrhoea, abdominal pain and nausea, weakness, headache, insomnia and nervousness. Exposures less than those which produce overt clinical signs may produce varying levels of liver damage with central lobular fatty degeneration, congestion and cellular infiltration; repeated low level exposures may produce cirrhosis. The kidney is less sensitive to pyridine-induced damage than is the liver. Pyridine, like primidone, phenobarbital and oxazepam induces liver neoplasms in mice, but not in rats, even though in rats these chemicals cause a spectrum of toxic liver lesions. The mouse, an animal with a high background rate of liver neoplasms, is particularly sensitive to the development of malignant liver neoplasms following chemical exposure. There is equivocal evidence (1) that pyridine is carcinogenic in male F344/N rats (based on an increased incidence of renal tubule neoplasms), in female rats of the same species (based on increases in mononuclear cell leukaemia), in male Wistar rats (based on an increased incidence of mononuclear cell leukaemia), and clear evidence of carcinogenicity (1) in male and female B6C3F1 mice (based on increased incidences of malignant hepatocellular neoplasms). 1: National Toxicology Program Technical Report Series No. 470, March 2000

Ranvet Batphol Vitamin B Complex

Not available. Refer to individual constituents.

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

THIAMINE HYDROCHLORIDE:

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

TOXICITY

IRRITATION

NIACINAMIDE:

TOXICITY

IRRITATION

Oral (rat) LD50: 3500 mg/kg

Nil reported

Mutation in microorganisms

D-PANTHENOL:

TOXICITY

IRRITATION

Oral (mouse) LD50: 15000 mg/kg

Skin (rabbit): 500 mg/4h - mild

Intraperitoneal (mouse) LD50: 9000 mg/kg

Eye (rabbit): 0.5 mg - mild

Intravenous (mouse) LD50: 7000 mg/kg

Intravenous (rabbit) LD50: 4000 mg/kg

PYRIDOXINE HYDROCHLORIDE:

TOXICITY

IRRITATION

Oral (rat) LD50: 4000 mg/kg

Nil reported

CHOLINE CHLORIDE:

No significant acute toxicological data identified in literature search.

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RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: 5 - Mar - 2008

CHEMWATCH 4614-30

CD 2004/3 Page 10 of 11

Section 11 - TOXICOLOGICAL INFORMATION ...

RIBOFLAVINE 5'-MONOPHOSPHATE SODIUM SALT DIHYDRATE:
No significant acute toxicological data identified in literature search.

WATER:
No significant acute toxicological data identified in literature search.

Section 12 - ECOLOGICAL INFORMATION

DO NOT discharge into sewer or waterways.

Section 13 - DISPOSAL CONSIDERATIONS

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.
- Bury residue in an authorised landfill.
- Recycle containers if possible, or dispose of in an authorised landfill.

Section 14 - TRANSPORTATION INFORMATION

Shipping Name:
None
Dangerous Goods Class: None
UN/NA Number: None
ADR Number: None
Packing Group: None
Labels Required:
Additional Shipping Information:
International Transport Regulations:
IMO: None

HAZCHEM

None

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE

None

REGULATIONS

The following substances are found on/in Australian Inventory of Chemical Substances (AICS):
thiamine hydrochloride (CAS: 67-03-8)
niacinamide (CAS: 98-92-0)
d-panthenol (CAS: 81-13-0)
pyridoxine hydrochloride (CAS: 58-56-0)
choline chloride (CAS: 67-48-1)
riboflavine 5'-monophosphate sodium salt dihydrate (CAS: 130-40-5)

continued...

RANVET BATPHOL VITAMIN B COMPLEX

ChemWatch Material Safety Data Sheet
For Workplace - Small Volume Use Only.
Issue Date: 5 - Mar - 2008

CHEMWATCH 4614-30

CD 2004/3 Page 11 of 11

Section 15 - REGULATORY INFORMATION ...

water (CAS: 7732-18-5)

The following substances are found on/in Australian Inventory of Chemical Substances (AICS):

d-panthenol (CAS: 16485-10-2)

No data available for d-panthenol as (CAS: 17307-32-3).

Section 16 - OTHER INFORMATION

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