
SAFETY DATA SHEET

Section 1: IDENTIFICATION of CHEMICAL PRODUCT and COMPANY

Product Name:	Valabarb Euthanasia Solution
Product Identifier:	300 mg/mL sodium pentobarbitone solution for injection.
Product Code:	504385 (250 mL), 60020 (500 mL)
Recommended Use:	Injection for animal euthanasia. For use only by registered veterinary surgeons or persons authorised under relevant State or Territory legislation.
Restrictions on Use:	For animal treatment only. Not for use in animals intended for human or animal consumption.
Company Identification:	Jurox Pty Limited
Address:	85 Gardiner Street, Rutherford, NSW 2320, Australia
Customer Centre:	1800 023 312
Email:	customerservice@jurox.com.au
National Poisons Information Centre:	13 1126 (24 hours)
Emergency Telephone Number:	1800 023 312 (9am – 5pm, Monday to Friday)

Section 2: HAZARDS IDENTIFICATION

GHS Hazard Classifications: This product has been assessed according to GHS and is classified as follows:

GHS Category	Hazard code	Hazard Statement
Acute Toxicity Oral Category 3	H301	Toxic if swallowed
Eye Irritation Category 2A	H319	Causes serious eye irritation
Reproductive Toxicity Category 2	H361	Suspected of damaging fertility or the unborn child
Specific Target Organ Toxicity – Single Exposure Category 1	H370	Causes damage to organs
Chronic Aquatic Hazard Category 3	H412	Harmful to aquatic life with long lasting effects

GHS Label Elements:

Signal Word:

DANGER

Pictograms:



Skull &
Crossbones



Exclamation
Mark



Health
Hazard

Precautionary Statements:Prevention

P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear eye protection/face protection/protective gloves.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe vapours.
P273 Avoid release to the environment.

Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
P330 Rinse mouth.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 IF eye irritation persists: Get medical advice/attention.
P308+P313 IF exposed or concerned: Get medical advice/attention.

Storage

P405 Store locked up.

Disposal

P501 Dispose of container and any unused product by wrapping with paper and putting in garbage.

N.B.: The above statements are determined by Work Health and Safety regulations and may not reflect Signal Headings and First Aid and Safety statements on product labelling, which are determined by a competent authority during assessment for registration.

Other hazards: May irritate the skin due to its high pH (alkalinity).

Section 3: COMPOSITION / INFORMATION on INGREDIENTS

INGREDIENT	CAS No.	CONTENT
Pentobarbitone sodium	57-33-0	30%
Ethanol	64-17-5	<15%
Ingredients not contributing to hazardous	-	30 – 60%

Section 4: FIRST AID MEASURES

General Information: Consult the National Poisons Centre on 13 1126 or a doctor immediately in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If medical advice/attention is needed, have this SDS, product container or label at hand.

Symptoms and Effects of Exposure: CNS depressant. May cause sedation, respiratory depression and hypotension as well as susceptibility to infection and inadequate temperature regulation.

Inhalation: If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. If respiratory symptoms occur, remove patient to fresh air. Lay patient down and keep warm and rested. If breathing is shallow or has stopped, ensure airway is clear and apply resuscitation. If breathing is difficult, give oxygen and seek medical assistance immediately.

Ingestion: If swallowed, DO NOT induce vomiting. Rinse mouth. Keep subject warm and at rest. For advice, contact a doctor or the National Poisons Centre on 13 1126.

Skin: If skin contact occurs, remove contaminated clothing and wash affected area thoroughly with plenty of soap and water for at least 20 minutes. If skin irritation or rash occurs, get medical advice/attention.

Eye: If eye contact occurs, rinse cautiously with water for at least 20 minutes. Continue rinsing. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. If eye irritation persists, get medical advice/attention.

Injection: Urgently seek medical assistance. No antidote available. Treat symptomatically.

Recommended First Aid Facilities: Ready access to running water and soap is required. Accessible eyewash is required.

Advice to Doctor: Contains pentobarbitone, a barbiturate, at a high concentration.

Section 5: FIRE FIGHTING MEASURES

Flash Point: Unknown.

Hazardous Combustion Products: If involved in a fire, may emit noxious fumes. Non-combustible – not considered to be a significant fire risk.

Extinguishing Media: There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.

Protective Equipment: Protective gloves and boots and breathing apparatus.

Hazchem Code: 2X.

Section 6: ACCIDENTAL RELEASE MEASURES

Spills and Disposal: Wear appropriate protective clothing. For small spills, wash area well with excess water. For large spills, exclude non-essential people from the area. Contain spill and absorb with inert material such as soil, sand or absorbent granules and place in a sealable waste container. Ventilate area and wash spill site after pick-up complete. Dispose of waste safely in an approved landfill.

Protective Clothing: For appropriate personal protective equipment see section 8.

Environmental Precautions: Prevent from entering drains, waterways or sewers. If contamination of drains and waterways occurs, advise local authority.

Section 7: HANDLING AND STORAGE

Handling: The product should be handled with care to avoid exposure. Keep out of reach of children. Avoid self-injection, ingestion, contact with skin or eyes and inhalation of vapours. Use personal protective equipment as required. Do not eat, drink or smoke while handling product. Wash any protective clothing after use.

Storage: Valabarb Euthanasia Solution is a Scheduled Poison (S4) and therefore must be stored and maintained in accordance with the relevant State Poisons Act. Store in original container, away from foodstuffs. Store below 30°C (room temperature). Protect from light.

Other Information: Always read the label before use. See label for further information on handling and storage.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

This SDS describes personal protective measures relating to long term industrial and manufacturing exposure and emergency situations, such as accidents and spills. See product label for personal protective measures during normal use of the marketed product.

Exposure Limits: No exposure limits have been assigned for this product. Known exposure limits for ingredients are as follows:

Occupational Exposure Limits (OEL)

Australian Exposure Standards

INGREDIENT	TWA	STEL
Ethanol	1880 mg/m ³ / 1000 ppm	Not available

Emergency Limits

INGREDIENT	TEEL-1	TEEL-2	TEEL-3
Pentobarbitone sodium	0.35 mg/m ³	3.9 mg/m ³	23 mg/m ³
Ethanol	Not available	Not available	15000 ppm

Engineering Controls: Use only in a well ventilated area. Ensure that the work environment remains clean.

Personal Protective Equipment (PPE):

Eye Protection: Protective glasses or goggles are recommended when handling bulk quantities of this product.

Skin Protection: When handling bulk product, prevent skin contact by wearing chemical protective gloves e.g. PVC.

Respiratory Protection: Not required for the normal use of this product.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear green fluorescent liquid.	Upper / Lower Flammability Limits:	Not available.
Odour:	Not available.	Vapour Pressure:	Not available.
Odour Threshold:	Not available.	Vapour Density:	Not available.
pH:	10 – 11.5	Relative Density / Specific Gravity:	1.075
Melting Point / Freezing Point:	Not available.	Solubility:	Miscible.
Boiling Point and Boiling Range:	Not available.	Partition Coefficient (n-octanol/water):	Not available.
Flash Point:	Not available.	Auto-Ignition Temperature:	Not available.
Evaporation Rate:	Not available.	Decomposition Temperature:	Not available.
Flammability:	Not available.	Viscosity:	Not available.

Section 10: STABILITY AND REACTIVITY

Reactivity: This product is unlikely to react or polymerise under normal storage conditions.

Chemical Stability: When stored appropriately this product should show no significant degradation within the expiry period shown on the label.

Conditions to Avoid: Extreme temperatures.

Incompatible Materials: None known.

Hazardous Decomposition Products: Decomposes on heating and may produce toxic fumes of carbon monoxide. Decomposition may produce toxic fumes of carbon dioxide, nitrogen oxides, other pyrolysis products typical of burning organic material.

Section 11: TOXICOLOGICAL INFORMATION**Acute Toxicity:**

Ingestion: Based on available data for the ingredients, the mixture is classified as **Acute Toxicity Oral Category 3**. Toxic effects may result from ingestion of this product. Animal experiments indicate that ingestion of less than 40 g of pentobarbitone sodium may be fatal or produce serious damage to the health of the individual.

Pentobarbitone sodium: (oral) LD₅₀: 60 mg/kg (guinea pig), (oral) TDLo: 6.43 mg/kg (man), (intravenous) LD₅₀: 81 mg/kg (mouse), (intravenous) LD₅₀: 40 mg/kg (rabbit), (oral) LD₅₀: 118 mg/kg (rat).

Inhalation: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be acutely toxic if inhaled. Not normally a hazard due to the non-volatile nature of the product.

Dermal: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be acutely toxic by the dermal route.

Injection: Injection of barbiturates produces CNS depression ranging from sleep to profound coma to death.

Aspiration Hazard: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be an aspiration hazard.

Respiratory Irritation: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be a respiratory irritant.

Skin Corrosion / Irritation: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be a skin irritant. However, may irritate the skin due to its high pH (alkalinity).

Serious Eye Damage / Irritation: Based on available data for the ingredients, the mixture is classified as **Eye Irritation Category 2A**. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. Direct contact of the eye with ethanol may cause an immediate stinging and burning sensation, with reflex closure of the lid, and a temporary, tearing injury to the cornea together with redness of the conjunctiva. Discomfort may last 2 days but usually the injury heals without treatment.

Respiratory or Skin Sensitisation: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be a skin sensitizer.

Germ Cell Mutagenicity: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be mutagenic.

Carcinogenicity: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be carcinogenic.

Reproductive Toxicity: Based on available data for the ingredients, the mixture is classified as **Reproductive Toxicity Category 2**. Neonates born to women who receive barbiturates throughout the last trimester of pregnancy may show withdrawal symptoms from 1-14 days after birth. Pentobarbital is excreted into breast milk.

Specific Target Organ Toxicity (STOT): Single exposure: Based on available data for the ingredients, the mixture is classified as **Specific Target Organ Toxicity – Single Exposure Category 1**. Exposure to pentobarbitone produces acute systemic effects on the cardiovascular, neurological and respiratory systems.

Specific Target Organ Toxicity (STOT): Repeated exposure: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be a specific target organ toxicant after repeat exposure. However, barbiturates cause an alcoholism-like syndrome when used long term. Symptoms include disorientation, mental confusion, incoordination, dizziness, depression and skin rashes. Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents.

Narcotic Effects: Continued misuse of very small amounts can lead to barbiturate dependence.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Based on available data for the ingredients, the mixture is classified as **Chronic Aquatic Hazard Category 3**.

Pentobarbitone sodium:

LC₅₀ (96 hr): 49.5 mg/L (fish).

Ethanol:

LC₅₀ (96 hr): 42mg/L (fish);

EC₅₀ (48 hr): 2mg/L (crustacea);

EC₅₀ (96 hr): 17.921mg/L (algae or other aquatic plants).

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Pentobarbitone sodium	HIGH	HIGH	LOW (LogKOW = 2.0043)	LOW (KOC = 114.4)
Ethanol	LOW (Half-life = 2.17 days)	LOW (Half-life = 5.08 days)	LOW (LogKOW = -0.31)	HIGH (KOC = 1)

Section 13: DISPOSAL INFORMATION

Product Disposal: Dispose of product only by using according to label or at an approved landfill.

Container Disposal: Dispose of empty container by wrapping with paper and putting in garbage.

Section 14: TRANSPORT INFORMATION

Dangerous Goods Classification: Classified as a Dangerous Good according to the criteria of the Australian Dangerous Goods (ADG) Code.

UN Number: 1851
Proper Shipping Name: MEDICINE, LIQUID, TOXIC, N.O.S. (contains pentobarbitone sodium).
DG Class: 6.1
Packing Group: III
Hazchem Code: 2X
Limited quantity: 5 L

Section 15: REGULATORY INFORMATION

Poisons Schedule: S4

APVMA Registration No: 36208

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

SUSMP: Pentobarbitone sodium is mentioned in SUSMP.

Section 16: OTHER INFORMATION**Legend:**

ADG	Australian Dangerous Goods
AICS	Australian Inventory of Chemical Substances.
APVMA	Australian Pesticides and Veterinary Medicines Authority
CAS No.	Chemical Abstracts Service Registry Number.
CNS	Central Nervous System.
DG	Dangerous goods.
EC₅₀	The median effect concentration, being a statistically derived concentration of a substance that can be expected to cause an adverse reaction in 50% of organisms or a 50% reduction in growth or in the growth rate of organisms.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters.
KOC	Soil-Water Partition Coefficient. The ratio of a chemical's concentration that is adsorbed in the soil to the concentration of chemical in solution.
KOW	Octanol Water Partition Coefficient. The ratio of a compound's concentration in a known volume of n-octanol to its concentration in a known volume of water after the octanol and water have reached equilibrium.
LC₅₀	The median lethal concentration, being a statistically derived concentration of a substance that can be expected to cause death in 50% of animals.
LD₅₀	The median lethal dose, being a statistically derived single dose of a substance that can be expected to cause death in 50% of animals.
N.O.S.	Not Otherwise Specified.
NICNAS	National Industrial Chemicals Notification and Assessment Scheme.
OEL	Occupational Exposure Limits.
PPE	Personal Protective Equipment.
PVC	Polyvinyl chloride.
STEL	Short term exposure limit.
STOT	Specific Target Organ Toxicity.
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons.
TEELs	Temporary Emergency Exposure Limits. Guidelines designed to predict the response of members of the general public to different concentrations of a chemical during an emergency response incident.
TEEL-1	The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic, nonsensory effects. However, these effects are not disabling and are transient and reversible upon cessation of exposure.
TEEL-2	The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting, adverse health effects or an impaired ability to escape.
TEEL-3	The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience life-threatening adverse health effects or death.
TWA	Time-Weighted Average. The average exposure over a specified period, usually a nominal eight hours.
UN Number	Number identifying a hazardous substance, assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

References:

ChemID Plus

EPA New Zealand Chemical Classification and Information Database (CCID)

HSDB (Hazardous Substances Data Bank)



This version issued: 01 February 2018 and is valid for 5 years from this date.

Supersedes: This SDS supersedes the version issued on 16 April 2015.

Revision History:

Date of Revision	Reason
01 FEB 2018	Minor updates to all the sections of SDS and addition of Revision History in Section 16.

This information is based on data believed by Jurox Pty Limited to be accurate at the time of writing but is subject to change without notice. It is given in good faith, but no warranty expressed or implied is made as to its accuracy, completeness otherwise and no assumption of liability from howsoever arising is made by Jurox Pty Limited by reason of the provision of this information. Every person dealing with the materials referred to herein do so at his/her own risk absolutely and must make independent determinations of suitability and completeness of information from all sources to ensure their proper use.

END OF SDS