

SAFETY DATA SHEET



Revision date: 14-May-2014

Version: 4.1

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Identifier

Material Name: SLEEPAWAY Euthanasia Solution

Trade Name: SLEEPAWAY

Chemical Family: Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Intended Use: Veterinary product

Restrictions on Use: Not for human use

Details of the Supplier of the Safety Data Sheet

Zoetis Inc.

100 Campus Drive, P.O. Box 651

Florham Park, New Jersey 07932 (USA)

Rocky Mountain Poison Control Center Phone: 1-866-531-8896

Product Support/Technical Services Phone: 1-800-366-5288

Zoetis Belgium S.A.

Mercuriusstraat 20

1930 Zaventem

Belgium

Emergency telephone number:

CHEMTREC (24 hours): 1-800-424-9300

Contact E-Mail: VMIPSrecords@zoetis.com

Emergency telephone number:

International CHEMTREC (24 hours): +1-703-527-3887

2. HAZARDS IDENTIFICATION

Appearance: Clear liquid

Classification of the Substance or Mixture

GHS - Classification

Acute Oral Toxicity: Category 4

Serious Eye Damage/Eye Irritation: Category 2A

Germ Cell Mutagenicity: Category 2

Reproductive Toxicity: Category 2

Specific target organ systemic toxicity (single exposure): Category 3

Acute aquatic toxicity: Category 3

Flammable liquids- Category 3

EU Classification:

EU Indication of danger: Harmful

Toxic to Reproduction: Category 3

Mutagenic: Category 3

EU Symbol: T

EU Risk Phrases:

R10 - Flammable.

R22 - Harmful if swallowed.

R63 - Possible risk of harm to the unborn child.

R68 - Possible risk of irreversible effects.

Label Elements

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2. HAZARDS IDENTIFICATION

Signal Word:	Warning
Hazard Statements:	H226 - Flammable liquid and vapor H302 - Harmful if swallowed H318 - Causes serious eye damage H341 - Suspected of causing genetic defects H361 - Suspected of damaging fertility or the unborn child H336 - May cause drowsiness and dizziness H402 - Harmful to aquatic life
Precautionary Statements:	P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking P233 - Keep container tightly closed P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical/ventilating/lighting/equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P280 - Wear protective gloves/protective clothing/eye protection/face protection P264 - Wash hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P271 - Use only outdoors or in a well-ventilated area P273 - Avoid release to the environment P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P370 + P380 + P375 - In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction P301+ P312 - IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell 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 attention/advice P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P312 - Call a POISON CENTRE/doctor/physician if you feel unwell P403 + P233 - Store in a well-ventilated place. Keep container tightly closed P405 - Store locked up P501 - Dispose of contents/container in accordance with all local and national regulations



Other Hazards

Short Term:	Use of this drug is habit forming. Addiction may occur. May cause eye irritation (based on components) .
Known Clinical Effects:	Drugs of this class may cause effects on nervous system, respiratory depression, confusion, decreased heart rate (bradycardia), troubled breathing, weakness, drowsiness, headache, symptoms of dependence/withdrawal, and fever.

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Australian Hazard Classification (NOHSC): Hazardous Substance. Non-Dangerous Goods.

Note: This document has been prepared in accordance with standards for workplace safety, which requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Pentobarbital sodium	57-33-0	200-323-9	Xn;R63 T;R25 Mut.Cat.3;R68	Acute Tox 3 H301 Repro Cat. 2 H361 Mut Cat. 2 H341 Aq Acute 3 H402	26
Propylene glycol	57-55-6	200-338-0	Not Listed	Not Listed	20.7
Isopropyl alcohol	67-63-0	200-661-7	F; R11 Xi; R36 R67	STOT SE 3 (H336) Flam. Liq. 2 (H225) Eye Irrit. 2A (H319)	7.8

Additional Information: Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.

For the full text of the R phrases and CLP/GHS abbreviations mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of First Aid Measures

Eye Contact: Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention immediately.

Skin Contact: Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek medical attention.

Ingestion: Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.

Inhalation: Remove to fresh air and keep patient at rest. Seek medical attention immediately.

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms and Effects of Exposure: For information on potential signs and symptoms of exposure, See Section 2 - Hazards Identification and/or Section 11 - Toxicological Information.

Medical Conditions Aggravated by Exposure: None known

Indication of the Immediate Medical Attention and Special Treatment Needed

Notes to Physician: None

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Extinguish fires with CO2, extinguishing powder, foam, or water.

Special Hazards Arising from the Substance or Mixture

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Hazardous Combustion Products:

Formation of toxic gases is possible during heating or fire.

Fire / Explosion Hazards:

Flammable liquid. Fine particles (such as dust and mists) may fuel fires/explosions. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

Advice for Fire-Fighters

Wear approved positive pressure, self-contained breathing apparatus and full protective turn out gear. Dike and collect water used to fight fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

Environmental Precautions

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Methods and Material for Containment and Cleaning Up

Measures for Cleaning / Collecting:

Contain the source of the spill if it is safe to do so. Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electricity), and follow appropriate grounding procedures. Absorb spills with non-combustible absorbent material and transfer into a labeled container for disposal. Clean spill area thoroughly.

Additional Consideration for Large Spills:

Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel. Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electricity), and follow appropriate grounding procedures. Collect spill with a non-combustible absorbent material and transfer to labeled container for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Flammable liquid and vapor- keep away from ignition sources and clean up spills promptly. Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electricity), and follow appropriate grounding and bonding procedures. Avoid contact with eyes, skin, and clothing. Use appropriate personal protective equipment. Wash thoroughly after handling. Avoid breathing vapor or mist. Refer to Section 12 - Ecological Information, for information on potential effects on the environment. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other equivalent controls.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions:

Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks, flame, and other sources of ignition. Store as directed by product packaging.

Specific end use(s):

Veterinary product

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Refer to available public information for specific member state Occupational Exposure Limits.

Propylene glycol

Australia TWA

150 ppm
474 mg/m³
10 mg/m³

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ireland OEL - TWAs	150 ppm
	470 mg/m ³
	10 mg/m ³
Latvia OEL - TWA	7 mg/m ³
Lithuania OEL - TWA	7 mg/m ³
Isopropyl alcohol	
ACGIH Threshold Limit Value (TWA)	200 ppm
ACGIH Threshold Limit Value (STEL)	400 ppm
ACGIH - Biological Exposure Limit:	40 mg/L
Australia STEL	500 ppm
	1230 mg/m ³
Australia TWA	400 ppm
	983 mg/m ³
Austria OEL - MAKs	200 ppm
	500 mg/m ³
Belgium OEL - TWA	200 ppm
	500 mg/m ³
Bulgaria OEL - TWA	980.0 mg/m ³
Czech Republic OEL - TWA	500 mg/m ³
Denmark OEL - TWA	200 ppm
	490 mg/m ³
Estonia OEL - TWA	150 ppm
	350 mg/m ³
Finland OEL - TWA	200 ppm
	500 mg/m ³
Germany - TRGS 900 - TWAs	200 ppm
	500 mg/m ³
Germany (DFG) - MAK	200 ppm
	500 mg/m ³
Germany - Biological Exposure Limit:	25 mg/L
Greece OEL - TWA	400 ppm
	980 mg/m ³
Hungary OEL - TWA	500 mg/m ³
Ireland OEL - TWAs	200 ppm
Japan - OELs - Ceilings	400 ppm
	980 mg/m ³
Latvia OEL - TWA	350 mg/m ³
Lithuania OEL - TWA	150 ppm
	350 mg/m ³
OSHA - Final PELs - TWAs:	400 ppm
	980 mg/m ³
Poland OEL - TWA	900 mg/m ³
Portugal OEL - TWA	200 ppm
Romania OEL - TWA	81 ppm
	200 mg/m ³
Romania - Biological Exposure Limit:	50 mg/L
Slovakia OEL - TWA	200 ppm
	500 mg/m ³
Slovenia OEL - TWA	200 ppm
	500 mg/m ³
Spain OEL - TWA	200 ppm
	500 mg/m ³

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Spain - Biological Exposure Limit:	40 mg/L
Sweden OEL - TWAs	150 ppm
	350 mg/m ³
Switzerland OEL -TWAs	200 ppm
	500 mg/m ³

The purpose of the Occupational Exposure Band (OEB) classification system is to separate substances into different Hazard categories when the available data are sufficient to do so, but inadequate to establish an Occupational Exposure Limit (OEL). The OEB given is based upon an analysis of all currently available data; as such, this value may be subject to revision when new information becomes available.

Pentobarbital sodium

Zoetis OEB OEB 2 (control exposure to the range of 100ug/m³ to < 1000ug/m³)

Exposure Controls

Engineering Controls:	Engineering controls should be used as the primary means to control exposures. Keep air contamination levels below the exposure limits or within the OEB range listed above in this section.
Personal Protective Equipment:	Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).
Hands:	Impervious gloves are recommended if skin contact with drug product is possible and for bulk processing operations.
Eyes:	Wear safety glasses or goggles if eye contact is possible.
Skin:	Impervious protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations.
Respiratory protection:	If airborne exposures are within or exceed the Occupational Exposure Band (OEB) range, wear an appropriate respirator with a protection factor sufficient to control exposures to the bottom of the OEB range.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	Color:	Clear
Odor:	Alcohol	Odor Threshold:	No data available.
Molecular Formula:	Mixture	Molecular Weight:	Mixture

Solvent Solubility:	Soluble: Common organic solvents
Water Solubility:	No data available
Solubility:	Soluble: Water
pH:	No data available.
Melting/Freezing Point (°C):	No data available
Boiling Point (°C):	No data available.
Partition Coefficient: (Method, pH, Endpoint, Value)	No data available
Decomposition Temperature (°C):	No data available.
Evaporation Rate (Gram/s):	No data available
Vapor Pressure (kPa):	No data available
Vapor Density (g/ml):	No data available
Relative Density:	No data available
Specific Gravity:	1.062
Viscosity:	No data available

Flammability:

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Autoignition Temperature (Solid) (°C):	No data available
Flammability (Solids):	No data available
Flash Point (Liquid) (°C):	39.4
Upper Explosive Limits (Liquid) (% by Vol.):	12.7 (isopropanol)
Lower Explosive Limits (Liquid) (% by Vol.):	2.3 (isopropanol)

10. STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions of use.
Possibility of Hazardous Reactions	
Oxidizing Properties:	No data available
Conditions to Avoid:	Fine particles (such as mists) may fuel fires/explosions. Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electrostatic discharge).
Incompatible Materials:	As a precautionary measure, keep away from strong oxidizers
Hazardous Decomposition Products:	No data available

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

General Information: Toxicological properties of the formulation have not been investigated. The information included in this section describes the potential hazards of the individual ingredients.

Acute Toxicity: (Species, Route, End Point, Dose)

Isopropyl alcohol

Rat	Oral	LD50	> 2000 mg/kg
Mouse	Oral	LD50	3600 mg/kg
Rat	Inhalation	LC50-8h	16,000 ppm
Rabbit	Dermal	LD50	12800 mg/kg
Rat	Inhalation	LC50	30mg/L

Pentobarbital sodium

Rat	Oral	LD50	118 mg/kg
Mouse	Oral	LD50	239mg/kg

Acute Toxicity Comments: A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable at the highest dose used in the test.

Irritation / Sensitization: (Study Type, Species, Severity)

Isopropyl alcohol

Eye Irritation	Rabbit	Severe
Skin Irritation	Rabbit	Mild

Propylene glycol

Skin Irritation	Rabbit	Mild
Eye Irritation	Rabbit	Mild

Isopropyl alcohol

20 Week(s)	Rat	Inhalation	4000 ppm	NOAEL	Liver, Central nervous system
104 Week(s)	Rat	Inhalation	5000 ppm	Kidney	

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11. TOXICOLOGICAL INFORMATION

Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))

Isopropyl alcohol

Prenatal & Postnatal Development	Rat	Inhalation	7,000 ppm	LOAEL	Maternal toxicity, Fetotoxicity, Embryotoxicity
2 Generation Reproductive Toxicity	Rat	Oral	1000 mg/kg/day	LOAEL	Maternal Toxicity, Fetal mortality
Prenatal & Postnatal Development	Rat	Oral	1200 mg/kg/day	NOAEL	No effects at maximum dose

Pentobarbital sodium

Embryo / Fetal Development	Rat	No route specified	Dose not specified	Teratogenic
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Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

Isopropyl alcohol

Bacterial Mutagenicity (Ames)	<i>Salmonella</i>	Negative
Mammalian Cell Mutagenicity	HGPRT Chinese Hamster Ovary (CHO) cells	Negative
<i>In Vitro</i> Sister Chromatid Exchange		Negative

Pentobarbital sodium

Micronucleus	Mouse	Positive
<i>In Vivo</i> Cytogenetics	Hamster	Positive
Dominant Lethal Assay	Hamster	Positive

Carcinogen Status:

None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

Isopropyl alcohol

IARC: Group 3 (Not Classifiable)

12. ECOLOGICAL INFORMATION

Environmental Overview:

Environmental properties of the formulation have not been investigated. Releases to the environment should be avoided. See aquatic toxicity data for individual components below:

Toxicity:

Aquatic Toxicity: (Species, Method, End Point, Duration, Result)

Pentobarbital sodium

<i>Pimephales promelas</i> (Fathead Minnow)	LC50	96 Hours	49.5 mg/L
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Persistence and Degradability: No data available

Bio-accumulative Potential: No data available

Mobility in Soil: No data available

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13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods: Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

14. TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

This material is regulated for transportation as a hazardous material/dangerous good.

UN number: UN 3248
UN proper shipping name: Medicine, liquid, flammable, toxic, n.o.s (pentobarbital sodium) Ltd. Qty.
Transport hazard class(es): 3
Packing group: III
Flash Point (°C): 39.4

For small quantities packed in combination packaging [limited to inner packaging < 1.0L (0.3 gal) and outer packaging < 30 kg (66 lb.) gross weight], the following will apply: If your commodity meets the definition of a limited quantity and is packaged for retail sale, it may be considered a consumer commodity and excepted from additional requirements as applicable.

IATA / ICAO

IATA UN / ID No: UN 3248
IATA Proper shipping name: Medicine, liquid, flammable, toxic, n.o.s (isopropanol, pentobarbital sodium) Ltd. Qty.
IATA Hazard Class: 3
IATA Packing Group: III

IMDG IMDG

IMDG UN / ID No: UN 3248
IMDG Proper shipping name: Medicine, liquid, flammable, toxic, n.o.s (isopropanol, pentobarbital sodium) Ltd. Qty.
IMDG Hazard Class: 3
IMDG Packing Group: III
Flash Point (°C): 39.4

ADR/RID

ADR / RID UN / ID No: UN 3248
ADR/RID Proper shipping name: Medicine, liquid, flammable, toxic, n.o.s (isopropanol, pentobarbital sodium) Ltd. Qty.
ADR / RID Hazard Class: 3 (6.1)
ADR / RID Packing Group: III

DOT

DOT Proper shipping name: Consumer Commodity
DOT Hazard Class: ORM-D

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

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15. REGULATORY INFORMATION

Canada - WHMIS: Classifications

WHMIS hazard class:

Class B, Division 3
Class D, Division 1, Subdivision B
Class D, Division 2, Subdivision A
Class D, Division 2, Subdivision B



Pentobarbital sodium

CERCLA/SARA 313 Emission reporting	1.0 %
California Proposition 65	developmental toxicity initial date 7/1/90
Australia (AICS):	Present
EU EINECS/ELINCS List	200-323-9

Propylene glycol

CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS/ELINCS List	200-338-0

Isopropyl alcohol

CERCLA/SARA 313 Emission reporting	1.0 %
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS/ELINCS List	200-661-7

REACH Authorizations:	3.0
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16. OTHER INFORMATION

Text of R phrases and GHS Classification abbreviations mentioned in Section 3

H225 - Highly flammable liquid and vapor
H301 - Toxic if swallowed
H319 - Causes serious eye irritation
H336 - May cause drowsiness and dizziness
H341 - Suspected of causing genetic defects
H361 - Suspected of damaging fertility or the unborn child

R10 - Flammable.
R25 - Toxic if swallowed.
R46 - May cause heritable genetic damage.
R63 - Possible risk of harm to the unborn child.

Data Sources: The data contained in this MSDS may have been gathered from confidential internal sources, raw material suppliers, or from the published literature.

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Reasons for Revision:

Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking.
Updated Section 2 - Hazard Identification. Updated Section 3 - Composition / Information on
Ingredients. Updated Section 5 - Fire Fighting Measures. Updated Section 8 - Exposure
Controls / Personal Protection. Updated Section 11 - Toxicology Information. Updated Section
15 - Regulatory Information.

Prepared by:

Toxicology and Hazard Communication
Zoetis Global Risk Management

Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

End of Safety Data Sheet