Section 1: IDENTIFICATION of CHEMICAL PRODUCT and COMPANY

Product Name: **Linctol Cough Mixture**

Product Identifier: A 2 mg/mL dextromethorphan hydrobromide, 1 mg/mL ephedrine hydrochloride and 0.4 mg/mL chlorpheniramine maleate liquid oral formulation for dogs and cats.

Recommended Use: For the suppression of coughing in dogs and cats.

Restrictions on Use: For animal treatment only.

Company Identification: Zoetis Australia Pty Ltd
ABN: 94 156 476 425

Address: Level 6, 5 Rider Boulevard
Rhodes NSW 2138
Australia

Telephone: 1800 814 883
Fax: (02) 8876 0444

Email: productsupport.au@zoetis.com

National Poisons Information Centre: 13 11 26 (all hours)

Police, Fire Brigade, Ambulance: Dial 000

Emergency Telephone Number: 1800 814 883 (all hours)

Section 2: HAZARDS IDENTIFICATION

Hazard Classifications: This product has been assessed according to GHS and is classified as non-hazardous.

Signal word: None.

GHS Pictograms: None.

Precautionary statements: None.

Section 3: COMPOSITION / INFORMATION on INGREDIENTS

INGREDIENT	CAS No.	CONTENT
Dextromethorphan hydrobromide	125-69-9	0.2 %
Ephedrine hydrochloride	50-98-6	0.1 %
Chlorpheniramine maleate	113-92-8	0.04 %
Ingredients not contributing to the hazards	-	> 99 %

Section 4: FIRST AID MEASURES

General Information: Consult the National Poisons Centre on 13 11 26 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: Ephedrine and its derivatives mimic adrenaline, and may produce severe high blood pressure if ingested. Large doses may cause giddiness, headache, nausea, vomiting, sweating, thirst, rapid heartbeat, itchiness, pain in the front of the chest, palpitations, difficulty in urinating, muscle weakness and tremors, restlessness and difficulty sleeping. Due to the presence of dextromethorphan hydrobromide, overdose may produce paranoid psychosis, delusions and hallucinations.

Inhalation: If fumes, aerosols or combustion products are inhaled remove patient from contaminated area. Other measures are usually not necessary. 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. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully.

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.

Eye: If eye contact occurs: Immediately flush the eye continuously with running water. 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. Continue flushing for at least 20 minutes. If eye irritation persists, get medical advice/attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

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

Advice to Doctor: Contains a bronchodilator (ephedrine hydrochloride), a morphinan (dextromethorphan hydrobromide) and an antihistamine (chlorpheniramine maleate). Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Flash Point: No data for mixture.

Hazardous Combustion Products: If involved in a fire, may emit poisonous and irritant fumes.

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 breathing apparatus.

HAZCHEM Code: None specified.

Section 6: ACCIDENTAL RELEASE MEASURES

Spills and Disposal: Wear gloves and appropriate protective clothing. Avoid breathing vapours and contact with skin and eyes. Clean up all spills immediately. For small spills, clean up spilled product then wipe area and put empty container in garbage. For large spills, exclude non-essential people from the area. Contain and absorb spill with sand, earth, inert material or vermiculite. Prevent spillage from entering drains or water courses and call emergency services.

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

Environmental Precautions: Prevent from entering drains, waterways or sewers. If spill does enter waterways contact local authority.

Section 7: HANDLING AND STORAGE

Handling: This is a Schedule 4 (Prescription Animal Remedy) product and therefore must be stored and maintained in accordance with the relevant State Poisons Act. Handle this product with care to avoid exposure, taking all recommended precautions. Avoid contact with skin, eyes and inhalation of vapours. Use personal protective equipment as required. Do not eat, drink or smoke while handling product.

Storage: Keep out of reach of children. Store below 30ºC (room temperature).

Other Information: Avoid contact with incompatible substances as listed in Section 10. Always read the label before use.

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 nor for any ingredients.

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

Personal Protective Equipment (PPE):

Eye protection: Safety glasses with side shields or chemical goggles are recommended when handling bulk quantities of this product.

Skin protection: When handling bulk quantities, prevent skin contact by wearing chemical protective gloves e.g. PVC. Wear safety gumboots, e.g. rubber.

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

Other: When handling bulk quantities of this product, overalls, PVC apron, barrier cream, skin cleansing cream and eye wash unit may be required.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear red liquid
Odour:	Aniseed
Odour threshold:	Not available
pH:	4.0 – 5.0
Melting Point:	Not applicable
Boiling Point:	Not available
Flash Point:	Not available
Evaporation Rate:	Not available
Flammability:	Combustible
Upper flammability limits:	Not available
Lower flammability limits:	Not available
Vapour Pressure:	Not available
Vapour density:	Not available
Relative density:	Not applicable
Specific Gravity:	1.20 – 1.27
Solubility in Water:	Miscible
Partition coefficient:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

Section 10: STABILITY AND REACTIVITY

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

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: Oxidising agents.

Hazardous Decomposition Products: Combustion products include carbon dioxide, nitrogen oxides, hydrogen bromide, hydrogen chloride, phosgene and other pyrolysis products typical of burning organic material.

Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity:
Ingestion: 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 oral route.

Dextromethorphan hydrobromide: Oral LD_{50}: 165 mg/kg (mouse);
Ephedrine hydrochloride: Oral LD_{50}: 316 mg/kg (rat), 400 mg/kg (mouse);
Chlorpheniramine maleate: Oral LD_{50}: 118 mg/kg (rat), 130 mg/kg (mouse).

Inhalation: 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 inhalation route.

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.

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.

Serious Eye Damage / Irritation: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be an eye irritant.

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 sensitiser or respiratory sensitiser.

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: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be a reproductive toxicant.

STOT: Single 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 single exposure.

STOT: Repeat 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.

Aspiration hazard: No data available.

Narcotic Effects: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to have any narcotic effects.

Section 12: ECOLOGICAL INFORMATION

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

Fish
Dextromethorphan hydrobromide: No data;
Ephedrine hydrochloride: LC_{50} (96h): ca. 464 mg/L;
Chlorpheniramine maleate: No data.

Crustacea
Dextromethorphan hydrobromide: No data;
Ephedrine hydrochloride: EC_{50} (48h): 56.1 mg/L;
Chlorpheniramine maleate: No data.

Algae and other aquatic plants
Dextromethorphan hydrobromide: No data;
Ephedrine hydrochloride: EC_{50} (72h): 41.1 mg/L, NOEC (72h): 3.13 mg/L;
Chlorpheniramine maleate: No data.

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Dextromethorphan hydrobromide	No data	No data	No data	No data
Ephedrine hydrochloride	No data	No data	No data	No data
Chlorpheniramine maleate	No data	No data	No data	No data

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: Not considered a Dangerous Good for land, sea and air transport.

Section 15: REGULATORY INFORMATION

Poison Schedule (SUSMP): Schedule 4

APVMA No.: 36337

Section 16: OTHER INFORMATION

This information is based on data believed by Zoetis Australia 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 Zoetis Australia Pty Limited by reason of the provision of this information. Every person dealing with the materials referred to herein does 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.

Legend:

APVMA	Australian Pesticides and Veterinary Medicines Authority.
CAS No.	Chemical Abstracts Service Registry Number.
EC_{50}	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.
LC_{50}	The median lethal concentration, being a statistically derived concentration of a substance that can be expected to cause death in 50% of animals.
LD_{50}	The median lethal dose, being a statistically derived single dose of a substance that can be expected to cause death in 50% of animals.
NOEC	No-observable-effect-concentration.
PPE	Personal Protective Equipment.
PVC	Polyvinyl chloride.
SDS	Safety Data Sheet.
STOT	Specific Target Organ Toxicity.
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons.
SWA	Safe Work Australia.

References:

ChemID Plus
EPA New Zealand Chemical Classification and Information Database (CCID)
HSDB (Hazardous Substances Data Bank)

Revision History:

Date of Revision	Reason
4 October 2016	Classification of substance to GHS classification and update of SDS to comply with SWA Code of Practice.
16 August 2021	Five-yearly review. Addition of 'Product Identifier' and update to Jurox email address in Section 1. Minor changes throughout.
1 March 2023	Update of Customer Service and emergency telephone numbers to Zoetis numbers.
21 June 2024	Update to Zoetis SDS

END OF SDS