

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

Product name:	LYPOR® POUR ON
Recommended use:	Pour-on for the control of lice on cattle (insecticide).
Pack Sizes: NET CONTENT	1L, 2L, 2.5L, 3L, 5L
Company name:	Alleva Animal Health Limited
Address:	1/116a Harris Rd, East Tamaki, Auckland
Telephone:	0064-9-4181405
Emergency telephone number:	National Poisons Centre: 0800 764 766 (0800 POISON) Fire Service, Ambulance: Dial 111
Date of Preparation	8 July 2019
Restrictions of Use	Refer to Section 15

SECTION 2: HAZARDS IDENTIFICATION

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No: HSR002239

Pictograms



Irritant



Chronic



Ecotoxic

Signal Word: **DANGER**

HSNO Class.	Hazard Code	Hazard Statement	GHS Category
6.1E (oral)	H303	May be harmful if swallowed.	Acute Tox. 5
6.1E (dermal)	H313	May be harmful in contact with skin.	Acute Tox. 5
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
6.9A	H372	Causes damage to organs through prolonged or repeated exposure.	STOT RE 1



9.1A	H400/H410	Very toxic to aquatic life.	Aquatic Acute 1/Aquatic Chronic 1
9.3B	H432	Toxic to terrestrial vertebrates.	-
9.4B	H442	Toxic to terrestrial invertebrates.	-

Prevention Code Prevention Statement

P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fumes or vapours.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response Code Response Statement

P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code Storage Statement

None allocated	
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Disposal Code Disposal Statement

P501	Dispose of according to Local Regulations or Authorities
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SECTION 3: COMPOSITION

Product Components:		
Name	CAS #	Concentration
Temephos	3383-96-8	200g/L
Other		To 1L

SECTION 4: FIRST AID MEASURES

First Aid	<p>Skin Contact: Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/ attention.</p> <p>Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.</p>
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<p>Most important symptoms and effects, both acute and delayed</p> <p>Notes to Doctor</p>	<p>Ingestion: do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician if needed.</p> <p>Inhaled: Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult or if you feel unwell.</p> <p>Symptoms: May be harmful if swallowed. May be harmful in contact with skin. Causes mild skin irritation. Causes serious eye irritation. Causes damage to organs through prolonged or repeated exposure.</p> <p>Temephos is an organophosphate insecticide (a cholinesterase inhibitor). Give atropine. Pralidoxime chloride (2-PAM: PROTOPAM chloride) may be effective as an adjunct to atropine.</p>
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SECTION 5: FIRE FIGHTING MEASURES

Type of hazard:	Non Flammable, combustible or explosive.
Fire hazard properties:	Tempor Cattle is not flammable, but may burn. Hazardous fumes when heated to decomposition.
Extinguishing media and methods:	Treat the fire as for the other materials present.
Hazchem code:	2X
Recommended protective clothing:	When fighting a major fire wear full protective clothing including breathing apparatus. Do not allow to enter drains.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Wear protective equipment as detailed in Section 8. Evacuate personnel to safe areas.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.



Procedure for Spills:	Contain the spill and prevent further dispersion. Retrieve intact containers from site. Place damaged containers into containment devices. Absorb spills with inert material and place in waste containers. Wash the area with water and absorb with further inert material. Collect spilled material and place in sealable containers for subsequent disposal.
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SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	<ul style="list-style-type: none"> • Read label before use. • Do not breathe fumes or vapours. • Wash hands thoroughly after handling. • Do not eat, drink or smoke when using this product. • Avoid release to the environment. • Wear protective clothing as detailed in Section 8. • Apply with well-maintained and calibrated equipment.
Certified handlers:	Not required
Conditions for safe storage:	<ul style="list-style-type: none"> • Store away from incompatible materials listed in Section 10. • Keep out of reach of children. • Store in original container, tightly closed, away from foodstuffs. • This substance is subject to a requirement for an emergency management plan and secondary containment, whenever it is held in quantities of 100L or more. See Hazardous Substances (Emergency management) regulations).


SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm mg/m ³		STEL ppm mg/m ³	
	Temephos [3383-96-8]	10		



Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

Engineering controls:	Ensure that ventilation maintains dust levels below WES.
Personal protection: 	Respiratory protection: Not required during normal use. Use only in areas of poor ventilation. Skin protection: Clothing should consist of overalls with long sleeves and impervious gloves. Eye protection: Wear fully covered chemical safety goggles and masks.
General	Prevent exposure by using engineering controls, personal protective equipment and work practices that prevent skin contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Brown oily liquid solution
Odour	Not available
Odour Threshold	Not available
pH	Not available
Boiling Point	>180°C
Melting Point	Not available
Freezing Point	Not applicable
Flash Point	Not applicable
Flammability	Not applicable
Upper and Lower Explosive Limits	Not applicable
Vapour Pressure	Not available
Vapour Density	Not applicable
Specific Gravity	0.946 – 0.985 g / mL
Solubility in water	Insoluble in water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not applicable
Kinematic Viscosity	Not applicable



SECTION 10: STABILITY AND REACTIVITY

Stability of the substance:	This product is stable under normal conditions.
Conditions to avoid:	None known.
Material to avoid:	None known.
Hazardous decomposition products:	No hazardous products are expected, except when heated to decomposition.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute effects:	
Swallowed Dermal Inhalation Eye Skin	May be harmful if swallowed. May be harmful if in contact with skin. Not applicable. Causes serious eye irritation. Causes mild skin irritation.
Chronic and long-term effects:	
Reproductive Systemic	Not applicable.
Carcinogenicity	Not applicable.
Aspiration	Not applicable.
Germ Cell Mutagenicity	Not applicable.
STOT/RE	Causes damage to organs through prolonged or repeated exposure. Temephos may affect the nervous system.
Summaries Data	Temephos:: Symptoms of acute exposure are similar to other organophosphates and may include nausea, salivation, headache, loss of muscle coordination, and difficulty breathing. Temephos produces signs and symptoms typical of cholinesterase inhibition at moderate levels of exposure. Reported oral LD50 values of temephos range from 1226 to 13,000mg/kg in rats and 460 to 4700mg/kg in mice. Dermal LD50 (rabbit) is 970mg/kg. Temephos has the potential to cause significant toxic effects (depression of the activity of the enzyme cholinesterase in the blood and the brain) in mammals exposed over long periods of time. Humans ingested

	<p>256 mg/person/day for 5 days and 64mg/person/day (equivalent to 0.91 mg/kg/day) for 4 weeks without any symptoms or detectable effects on blood cholinesterase activity. In subchronic toxicity studies in rats and dogs, the most sensitive toxicological endpoint is cholinesterase inhibition. Dose related inhibition of plasma, red blood cell (RBC) and brain cholinesterase (ChE) activity occurs following repeated exposures of various durations. The severity of cholinergic symptoms correlates with the level of inhibition of plasma and RBC ChE activity. Rats are the more sensitive species to ChEI and male rats are the more sensitive sex. In rats, dietary temephos reduced plasma and RBC ChE activity at doses as low as 0.46 mg/kg.</p>
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SECTION 12: ENVIRONMENTAL INFORMATION

HSNO Classes: 9.1A= Very toxic to aquatic life.
 9.3B = Toxic to terrestrial vertebrates.
 9.4B = Toxic to terrestrial invertebrates.

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available
Data on Temephos:	<p>Temephos - Temephos is an organophosphate insecticide that is very toxic to the environment. LD50 Mallard duck, oral 79mg/kg (95% confidence limits 38.5-163 mg/kg), 4-7 months old /sample purity 92%/</p> <p>LD50 Northern bobwhite quail oral 27.4 mg/kg</p> <p>LD50 Japanese quail oral 84.1 mg/kg (95% confidence limits 60.6- 116 mg/kg) / sample purity 92%/</p> <p>LD50 House sparrow 35.4 mg/kg (95% confidence limits 8.85-141 mg/kg) / sample purity 92%/</p> <p>LD50 California quail, oral 18.9 mg/kg (95% confidence limits 15.0- 23.8 mg/kg) / sample purity 92%/</p> <p>LC50 Pteronarcy 0.010 mg/l (95% confidence</p>

	<p>limit 0.007-0.015 mg/l). LC50 Rainbow trout 3.49 mg/l (95% confidence limit 2.33-5.23 mg/l) LC50 Fathead minnow 34.1 mg/l (95% confidence limit 19.7-59.2 mg/l) LC50 Coho salmon 0.35 mg/l (95% confidence limit 0.23-0.33 mg/l) LC50 Rainbow trout 0.16 mg/l (95% confidence limit 0.10-0.24 mg/l) LC50 Cut throat trout 1.27ppm (96hr) EC50 Daphnia magna 0.011ppb (48hr) LC50 Bluegill 1.14 mg/l (95% confidence limit 0.80-1.53 mg/l) LD50 Bee topical 1.55 µg/bee</p> <p>Temephos is essentially immobile in soil. It is expected to hydrolyze in basic soils. Low to moderate persistence in soil. In water, temephos will adsorb to sediment and suspended organic matter. Aerobic biodegradation may occur but it is expected to be a slow process. Bioconcentration in fish and aquatic organisms. Photolyzed in water. Low persistence in water.</p>
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Do not allow to enter waterways or sewerage.

SECTION 13: DISPOSAL CONSIDERATIONS

Product disposal:	Preferably dispose of the product by use. Otherwise dispose of product and packaging at an approved landfill or other approved facility. Burn empty container in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill. Do NOT use container for any other purpose.
Precautions:	Do not allow to enter waterways.

SECTION 14: TRANSPORT INFORMATION

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012



Road and Rail Transport



UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
 LIQUID, N.O.S. (Temephos 20%)

Air Transport

UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
 LIQUID, N.O.S. (Temephos 20%)

Marine Transport

UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
 LIQUID, N.O.S. (Temephos 20%)
 Marine Pollutant: Yes

Limited Quantities Statement:

If the product's individual container is below 5kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG. The maximum quantity per package of this substance allowed for carriage on public transport is 1L.

SECTION 15: REGULATORY INFORMATION

Regulatory status:	HSR002239
HSW (HS) Regulations 2017	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	100L(9.1A)
Emergency Response Plan	100L (9.1A)
Secondary Containment	100L (9.1A)
Restrictions of Use	For intended use only.
HSNO Controls Controls have been set for this chemical. Please refer to controls document at www.epa.govt.co.nz – HSR002239	
Hazardous Substances (Hazardous Property Controls Notice) 2017	
HPC Notice Part 4 Clause 47	Equipment for Class 9 substances must be appropriate.
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators.
HPC Notice Part 3	Hazardous substances in a place other



	than a workplace.
HPC Notice Part 4 Subpart A	Site and storage controls for Class 9 substances.
ACVM Act and Regulations	
ACVM Approval No See www.foodsafety.govt.nz for registration controls	A11686

SECTION 16: OTHER INFORMATION

Glossary

EC50 Median effective concentration.

EEL Environmental Exposure Limit.

EPA Environmental Protection Authority

HSNO Hazardous Substances and New Organisms.

HSW Health and Safety at Work.

LC50 Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.

LD50 Lethal dose to kill 50% of test animals/organisms.

LEL Lower explosive level.

OSHA American Occupational Safety and Health Administration.

TEL Tolerable Exposure Limit.

TLV Threshold Limit Value-an exposure limit set by responsible authority.

UEL Upper Explosive Level

WES Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. ALLEVA Animal Health Limited makes no warranty with respect hereto and disclaims all liability from reliance thereon.

Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.



PLEASE READ ALL LABELS CAREFULLY BEFORE USING PRODUCT.

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