

SAFETY DATA SHEET



Title: Q-DRENCH

Document: SDS-NZ033

Rev: 4.0

PAGE 1 OF 11

Status: Current

Issue Date: 20-Mar-2024

Effective Date: 20-Mar-2024

Review Date: 20-Mar-2029

Section 1: IDENTIFICATION of CHEMICAL PRODUCT and COMPANY

Product Name: Q-Drench Multi-Combination Drench for Sheep

Product Identifier: 40 g/L levamisole hydrochloride, 37.5 g/L closantel, 25 g/L albendazole and 1 g/L abamectin aqueous suspension.

Recommended Use: Oral parasiticide for sheep.

Restrictions on Use: For animal treatment only.

Company Identification: Zoetis New Zealand Limited

Address: Level 4, 8 Mahuhu Crescent,
Auckland Central,
Auckland 1010,
New Zealand

Email: nzcontactus@zoetis.com

Customer Centre: 0800 963 847 (Business hours)

Emergency Telephone Number: National Poisons Centre: 0800 POISON (0800 764 766)
Emergency Services: In an emergency dial 111

Section 2: HAZARDS IDENTIFICATION

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

GHS Category	Hazard code	Hazard Statement
Acute Toxicity (Oral) Category 4	H302	Harmful if swallowed
Eye Irritation Category 2	H319	Causes serious eye irritation
Skin Sensitisation Category 1	H317	May cause an allergic skin reaction
Germ Cell Mutagenicity Category 2	H341	Suspected of causing genetic defects
Reproductive Toxicity Category 1	H360	May damage fertility or the unborn child
Reproductive toxicity: Effects on or via Lactation	H362	May cause harm to breast-fed children
Specific Target Organ Toxicity - Repeat Exposure Category 2	H373	May cause damage to organs through prolonged or repeated exposure
Acute Aquatic Hazard Category 1	H400	Very toxic to aquatic life
Chronic Aquatic Hazard: Category 1	H410	Very toxic to aquatic life with long lasting effects
Hazardous to the terrestrial environment	-	Hazardous to soil organisms, terrestrial vertebrates and terrestrial invertebrates.

Signal word: DANGER

SAFETY DATA SHEET

zoetis

Title: Q-DRENCH		Document: SDS-NZ033	
		Rev: 4.0	PAGE 2 OF 11
Status: Current	Issue Date: 20-Mar-2024	Effective Date: 20-Mar-2024	Review Date: 20-Mar-2029

GHS Pictograms:



Exclamation
Mark



Health
hazard



Aquatic
hazard

Precautionary statements:

Prevention

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe vapours.
P263	Avoid contact during pregnancy and while nursing.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves, eye protection and protective clothing.
P273	Avoid release to the environment.

Response

P301+P312	IF SWALLOWED: Call a POISON CENTRE or doctor 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.
P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.

Storage

P405	Store locked up.
------	------------------

Disposal

P501	If appropriate, recycle empty container. Otherwise, crush or puncture, and bury in a suitable landfill.
------	---

Other hazards: None known.

Section 3: COMPOSITION / INFORMATION on INGREDIENTS

INGREDIENT	CAS No.	CONTENT
Levamisole hydrochloride	16595-80-5	4 %
Closantel	57808-65-8	3.75 %
Albendazole	54965-21-8	2.5 %
Abamectin	71751-41-2	0.1 %
Ingredients not contributing to the hazards	-	~ 90 %

SAFETY DATA SHEET

zoetis

Title: Q-DRENCH		Document: SDS-NZ033	
		Rev: 4.0	PAGE 3 OF 11
Status: Current	Issue Date: 20-Mar-2024	Effective Date: 20-Mar-2024	Review Date: 20-Mar-2029

Section 4: FIRST AID MEASURES

General Information: Consult the National Poisons Centre on 0800 POISON (0800 764 766) 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: Symptoms of exposure to levamisole include high fever, swollen glands, painful sores on the mouth or anus, and lingering infections, including sore throat, mouth sores, skin infections, abscesses, thrush, or pneumonia. Symptoms of closantel intoxication include loss of appetite, ataxia (uncoordinated movements), weakness, visual disturbance and blindness. Common side effects of exposure to albendazole include nausea, abdominal pains and headaches. Clinical symptoms of severe abamectin intoxication include mydriasis, sedation, emesis, tremors, convulsions, coma and death.

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, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. For advice, contact a doctor or the National Poisons Centre on 0800 POISON (0800 764 766). Urgent hospital treatment is likely to be needed. In the meantime, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition. If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. If medical attention is not available on the worksite or surroundings send the patient to hospital together with a copy of the SDS. Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise: INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Wear a protective glove when inducing vomiting by mechanical means.

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 or rash.

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: No specific antidote. Treat symptomatically.

SAFETY DATA SHEET

zoetis

Title: Q-DRENCH			Document: SDS-NZ033	
			Rev: 4.0	PAGE 4 OF 11
Status: Current	Issue Date: 20-Mar-2024	Effective Date: 20-Mar-2024	Review Date: 20-Mar-2029	

Section 5: FIRE FIGHTING MEASURES

Flash Point: No data.

Hazardous Combustion Products: If involved in a fire, may emit toxic 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: 3Z

Section 6: ACCIDENTAL RELEASE MEASURES

Spills and Disposal: Wear gloves and appropriate protective clothing, footwear and eye protection. For small 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 is complete. Dispose of waste safely in an approved landfill. For large spills, exclude non-essential people from the area. Prevent spillage from entering drains or water courses. Contain spill with sand, earth or vermiculite 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: Handle this product with care to avoid exposure, taking all recommended precautions. Avoid contact with skin, eyes and inhalation of vapours. Use in a well-ventilated area. Use personal protective equipment as required. DO NOT allow material to contact humans, exposed food or food utensils. DO NOT allow clothing wet with material to stay in contact with skin. Do not eat, drink or smoke while handling this product.

Storage: Keep out of reach of children. Store below 30°C, in original container, tightly closed in a safe place, away from direct sunlight and away from foodstuffs. Protect containers against physical damage and check regularly for leaks.

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

SAFETY DATA SHEET

zoetis

Title: Q-DRENCH			Document: SDS-NZ033	
			Rev: 4.0	PAGE 5 OF 11
Status: Current	Issue Date: 20-Mar-2024	Effective Date: 20-Mar-2024	Review Date: 20-Mar-2029	

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 or its 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 product, 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 an eye wash unit may be required.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off-white suspension	Lower flammability limits:	Not available
Odour:	Not available	Vapour Pressure:	Not available
Odour threshold:	Not available	Vapour density:	Not available
pH:	5.0 – 5.5	Relative density:	Not applicable
Melting Point:	Not applicable	Specific Gravity:	Not available
Boiling Point:	Not available	Solubility in Water:	Miscible with water
Flash Point:	Not available	Partition coefficient:	Not available
Evaporation Rate:	Not available	Auto-ignition temperature:	Not available
Flammability:	Not flammable	Decomposition temperature:	Not available
Upper flammability limits:	Not available	Viscosity:	Not applicable

SAFETY DATA SHEET

zoetis

Title: Q-DRENCH		Document: SDS-NZ033	
		Rev: 4.0	PAGE 6 OF 11
Status: Current	Issue Date: 20-Mar-2024	Effective Date: 20-Mar-2024	Review Date: 20-Mar-2029

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: Oxidising agents.

Hazardous Decomposition Products: Decomposition may produce toxic fumes of carbon dioxide (CO₂) and nitrous oxides.

Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified as **Acute Toxicity (Oral) Category 4**. Toxic effects may result from the accidental ingestion of levamisole hydrochloride; animal experiments indicate that ingestion of less than 40 gram may be fatal or may produce serious damage to the health of the individual.

Levamisole hydrochloride: Oral LD₅₀: 180 mg/kg (rat), 223 mg/kg (mouse).

Closantel: Oral LD₅₀: 262 mg/kg (rat), 331 mg/kg (mouse).

Albendazole: Oral LD₅₀: 2400 mg/kg (rat), 1500 mg/kg (mouse).

Abamectin: Oral LD₅₀: 10 mg/kg (rat), 14 mg/kg (mouse).

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.

Levamisole hydrochloride: No data.

Closantel: No data.

Albendazole: No data.

Abamectin: Skin LD₅₀: 2000 mg/kg (rabbit).

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.

Levamisole hydrochloride: No data.

Closantel: No data.

Albendazole: No data.

Abamectin: Inhalation LC₅₀: 1100mg/m³ (rat).

Aspiration hazard: No data available.

Skin Corrosion / Irritation: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to cause skin corrosion/irritation.

Serious Eye Damage / Irritation: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified as **Eye Irritation Category 2**.

Respiratory or Skin Sensitisation: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified as **Skin Sensitisation Category 1**.

SAFETY DATA SHEET

zoetis

Title: Q-DRENCH			Document: SDS-NZ033
			Rev: 4.0
			PAGE 7 OF 11
Status: Current	Issue Date: 20-Mar-2024	Effective Date: 20-Mar-2024	Review Date: 20-Mar-2029

Germ Cell Mutagenicity: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified as **Germ Cell Mutagenicity Category 2**. Levamisole has been classified as a possible mutagen by the European Agency for the Evaluation of Medicinal Products [EMA]. *In vitro* and *in vivo* studies in humans at a dose of 2 mg/kg levamisole by injection shows chromosome gaps and breaks in human lymphocytes.

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 classified as **Reproductive Toxicity Category 1** and **Effects on or via Lactation**. A comprehensive series of developmental studies in mice, rats, rabbits, and sheep showed albendazole to be teratogenic. The malformations included visceral, craniofacial and bone defects (including shortened limbs). The lowest NOEL for any of the studies was 5 mg/kg bw/day for albendazole administered orally to rats or rabbits.

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. However, studies in dogs have shown that orally administered abamectin can elicit dose-dependent CNS effects, including tremors and ataxia.

STOT: Repeat exposure: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified as **Specific Target Organ Toxicity - Repeat Exposure Category 2**. Chronic exposure to levamisole can lead to agranulocytosis. This can be fatal, particularly if infection occurs but it is reversible. It occurs at relatively low doses even when given on non-consecutive days. No NOEL can be identified and if one exists it is probably extremely small.

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 classified as **Acute Aquatic Hazard Category 1**, **Chronic Aquatic Hazard Category 1** and **hazardous to the terrestrial environment**.

Fish

Levamisole hydrochloride: LC₅₀ (96h): 8.04 mg/L.
Closantel: LC₅₀ (96h): 0.017 mg/L.
Albendazole: LC₅₀ (96h): 9.86 mg/L.
Abamectin: No data.

Crustacea

Levamisole hydrochloride: No data.
Closantel: No data.
Albendazole: No data.
Abamectin: No data.

Algae and other aquatic plants

Levamisole hydrochloride: EC₅₀ (96h): 17.23 mg/L.
Closantel: EC₅₀ (96h): 0.0013 mg/L.
Albendazole: EC₅₀ (96h): 0.82 mg/L.
Abamectin: EC₅₀ (96h): 7.31 mg/L.

SAFETY DATA SHEET

zoetis

Title: Q-DRENCH			Document: SDS-NZ033	
			Rev: 4.0	PAGE 8 OF 11
Status: Current	Issue Date: 20-Mar-2024	Effective Date: 20-Mar-2024	Review Date: 20-Mar-2029	

Dung beetles

Abamectin is highly toxic to dung beetle larvae, with adult emergence reduced by 55 to 65% from dung collected two and four weeks post-treatment respectively. Abamectin is not toxic to mature egg-laying adults at concentrations likely to be found in dung. However, there is increased mortality and impaired development of larvae with sub-lethal effects on the morphology of some species in dung voided within 2-3 weeks of treatment, and increased mortality and delayed reproductive development in newly emerged adults of some species feeding on dung voided within 1 to 2 weeks of treatment. Dung of treated animals is highly toxic to dipteran larvae, inhibiting development for periods of 2 to 8 weeks post-treatment. The duration of these toxic effects on dung insects is consistent with the profile of excretion of the substance in faeces. The substance is also toxic to earthworms (14 day LC₅₀ 33 mg/kg soil).

Bees

Abamectin: LD₅₀: 0.002 ug/bee.

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Levamisole hydrochloride	HIGH	HIGH	LOW (LogKOW = 1.84)	LOW (KOC = 8652)
Closantel	HIGH	HIGH	LOW (LogKOW = 8.11)	LOW (KOC = 300200)
Albendazole	HIGH	HIGH	LOW (LogKOW = 3.14)	LOW (KOC = 1871)
Abamectin	No data	No data	No data	No data

Section 13: DISPOSAL INFORMATION

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

Container Disposal: Crush or puncture and bury in an approved landfill if an approved recycling system is not available.

Section 14: TRANSPORT INFORMATION

Dangerous Goods Classification: Considered a Dangerous Good for Transport in New Zealand according to criteria of the New Zealand Land Transport Rule for Dangerous Goods, 2005.

RAIL/ROAD (RID / ADR)

UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains ABAMECTIN)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

SAFETY DATA SHEET

zoetis

Title: Q-DRENCH			Document: SDS-NZ033
			Rev: 4.0
			PAGE 9 OF 11
Status: Current	Issue Date: 20-Mar-2024	Effective Date: 20-Mar-2024	Review Date: 20-Mar-2029

AIR (IATA)

UN number 3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains ABAMECTIN)
Transport hazard class(es)
Class 9
Subsidiary risk -
Packing group III
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

SEA (IMDG)

UN number 3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains ABAMECTIN)
Transport hazard class(es)
Class 9
Subsidiary risk -
Packing group III
Marine pollutant Yes
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

General Information: IMDG Regulated Marine Pollutant. As of January 1, 2015, materials offered for transport that are classified for transportation only as Marine Pollutants and which are packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are NOT subject to ICAO/IATA, IMDG, or ADR transport regulations provided the general packaging requirements of those regulations are met. Refer to ICAO/IATA A197, IMDG 2.10.2.7, ADR SP 375.

Section 15: REGULATORY INFORMATION

ACVM No.: A009291

HSNO Approval No: HSR100758

SAFETY DATA SHEET

zoetis

Title: Q-DRENCH		Document: SDS-NZ033	
		Rev: 4.0	PAGE 10 OF 11
Status: Current	Issue Date: 20-Mar-2024	Effective Date: 20-Mar-2024	Review Date: 20-Mar-2029

Section 16: OTHER INFORMATION

This information is based on data believed by Zoetis 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 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:

ACVM	Agricultural and Veterinary Medicines.
ADR	International Carriage of Dangerous Goods by Rail.
CAS No.	Chemical Abstracts Service Registry Number.
CCID	Chemical Classification and Information Database.
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.
EPA	Environmental Protection Authority – Te Mana Rauhi Taiao.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
HAZCHEM	Emergency action code of numbers and letters that provide information to emergency services especially firefighters.
HSNO	Hazardous Substances and New Organisms Act, 1996.
IATA	International Air Transport Association.
ICAO	International Civil Aviation Organization.
IMDG Code	International Maritime Dangerous Goods Code.
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.
NOEL	No-observed-adverse-effect-level. The level of exposure where there is no increase in the frequency or severity of any adverse effects in the exposed population when compared to its appropriate control.
PPE	Personal Protective Equipment.
PVC	Polyvinyl chloride.
RID	International Carriage of Dangerous Goods by Rail.
SDS	Safety Data Sheet.
STOT	Specific Target Organ Toxicity.

References:

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

SAFETY DATA SHEET



Title: Q-DRENCH

Document: SDS-NZ033

Rev: 4.0

PAGE 11 OF 11

Status: Current

Issue Date: 20-Mar-2024

Effective Date: 20-Mar-2024

Review Date: 20-Mar-2029

Revision History:

Date of Revision	Reason
17 August 2018	Updated to Globally Harmonised System of classification.
29 November 2018	Updated to for reclassification as per GHS, updates to sections 2 only.
29 October 2019	Update to DG information. Minor updates to sections 7, 11 and 12.
14 August 2020	Removal of skin corrosion/irritation: Category 3 classification and addition of chronic aquatic toxicity: Category 1 classification. Minor updates to other sections.
22 February 2023	Minor revision to include Zoetis contact info.
20 March 2024	Update to Zoetis SDS template and inclusion of terrestrial ecotoxicity classification.

END OF SDS