# **CYREX<sup>™</sup> Liquid**



CYREX Liquid has two proven active ingredients that provide knockdown control of blowflies, maggots and lice, as well as medium term protection against blowfly strike on sheep. These features, combined with its favourable operator and animal safety characteristics, make CYREX Liquid an ideal solution for treating blowfly strike and lice on sheep.

## **Registered indications**

- For the prevention and treatment of blowfly (including *Lucilia cuprina*) strike in all breeds of sheep, including organophosphate resistant strains, for up to 12 weeks.
- For the treatment of lice on long wool Merino sheep (greater than three months wool), including strains resistant to synthetic pyrethroids.
- For the control of lice on coarse wool breeds, including strains resistant to synthetic pyrethroids.

## **Active ingredients**

CYREX Liquid contains 12.5 g/L of spinosad, the active ingredient in EXTINOSAD™ Liquid, and 500 g/L of cyromazine, the active ingredient found in VETRAZIN™. Spinosad provides knockdown control of blowflies, maggot and lice. Cyromazine provides up to 12 weeks protection against blowfly strike.

#### **Mode of action**

Spinosad is a member of the spinosyn chemical family. Upon contact or ingestion, spinosad causes involuntary and prolonged tremors in the nervous system of susceptible species, leading to irreversible paralysis and death. Its unique mode of action kills blowfly and lice, including strains resistant to SP compounds. Spinosad has negligible human health risks or environmental toxicity.

Cyromazine is an insect growth regulator. It interferes with life cycle of susceptible insects by preventing the development of larval stages. Cyromazine has a different mode of action to some other IGR compounds, such as diflubenzuron (e.g. Fleecemaster® and Magnum®) and triflumuron (e.g Zapp®). This different mode of action allows cyromazine to be effective against triflumuron or diflubenzuron-resistant blowflies.<sup>3,4</sup>

#### **Features and benefits**

- **1. Safe, effective flystrike treatment.** Spinosad provides knockdown of existing strike while cyromazine provides up to 12 weeks protection against re-strike.
- **3. Knockdown control of lice.** Studies conducted with spinosad, one of the active ingredients in CYREX Liquid, controls lice within hours of treatment.<sup>1</sup>
- Effective against resistant strains. There is no recorded resistance to spinosad or cyromazine in blowflies or lice in New Zealand.
- **5. Operator and livestock safety.** Toxicology studies show cyromazine or spinosad present minimal risk to operators or treated animals.<sup>1,2</sup>
- **6. Environmental safety.** The two active ingredients in CYREX Liquid have very favourable environmental safety profiles.<sup>1,2</sup>
- Management flexibility. CYREX Liquid is suitable for uses on all classes of stock and has a seven day meat withholding period.

# **CYREX<sup>™</sup> Liquid**



### **Application**

**Jetting:** Mix 2 L of CYREX Liquid with 1000 L of water. Ensure saturation to skin level. Top up at the same rate. Apply a minimum of 2 L of dipwash per sheep and an additional 0.5 L for each month of wool growth up to a maximum of 5 L per sheep. Prepare a fresh solution each day.

**Constant replenishment shower dip:** Mix 2 L of CYREX Liquid with 1000 L of water. Ensure saturation to skin level. Top up at the same rate. No reinforcement is required. Do not allow the sump to fall below of total volume. Prepare a fresh solution each day.

**Flystrike dressing:** Mix 10 mL of CYREX Liquid with 5 L of water. Remove the wool from around the area to be treated using clippers or shears. Apply onto the affected area for the spot treatment of flystrike. Prepare a fresh dilution of flystrike dressing each day.



# For more information, please contact your local

**Elanco Territory Manager.** 

References: 1. EXTINOSAD Jetting Fluid /Flystrike Dressing for Sheep in Long Wool Technical Manual Version 1 30/11/00. Elanco Animal Health (For internal use only). 2. Hart R.J. et al. Technical Details of a new sheep blowfly insecticide. Wool Technology and Sheep Breeding. University of New South Wales, December 1979. 3. Levot, G. & Sales, N. Insect growth regulator cross-resistance studies in field- and laboratory selected strains of the Australian sheep blowlfly (Lucilia cuprina). Australian Journal of Entomology (2004) 43: 374 – 377. 4. Heath. A. & Levot, G. Parasiticide resistance in fleece, lice and ticks in New Zealand and Australia: mechanisms, prevalence and prevention. NZ Veterinary Journal (2015).

CYREX Liquid contains 12.5 g/L spinosad and 500 g/L cyromazine. Registered to Elanco Animal Health, Division of Eli Lilly and Company (NZ) Ltd., Level 1, 123 Ormiston Road, Botany Junction, Auckland, 2016. Registered pursuant to the ACVM Act 1997, No. A09917. See www.foodsafetv.ov/t.nz for registration conditions.

Elanco™, CYREX™, VETRAZIN™ and the diagonal colour bar are trademarks owned or licensed by Eli Lilly and Company, its subsidiaries or affiliates. ©2016 Elanco Animal Health, Division of Eli Lilly and Company (NZ) Ltd. Fleecemaster® is registered to Merial Ancare (A7849). Magnum® is a trademark of Schering Plough Animal Health (A7704). Zapp® is registered to Bayer New Zealand Limited (A7299). EAH16006 NZSHPPAF00002

#### **General information**

**Fly:** A shorter period of protection may occur if CYREX Liquid is applied incorrectly, if there is excessive fleece soiling or if dags are present.

Lice: Thorough wetting is essential for effective control. Check skin wetting using a wetting pencil. Good agricultural practice is essential for optimal lice control. This includes attention to stock security following treatment, quarantine treatment of new stock arrivals, thorough and accurate dipping management and utilising the principles of Integrated Pest Management recommended by Wool Pro.

**Fly and Lice:** It is good agricultural practice not to treat animals when they are wet or if rain is likely. Prolonged heavy rain following treatment may reduce efficacy. Consider retreatment of sheep after heavy rain to ensure continued protection.

#### **Summary**

CYREX Liquid an ideal solution for treating blowfly strike and lice on sheep:

- Two proven active ingredients
- Knockdown control of blowflies and maggots, including OP resistant strains
- Up to 12 weeks protection against blowfly strike
- Knockdown control of lice, including SP resistant strains
- 7 day meat withholding period
- Favourable operator and environmental safety profile



#### **Elanco Animal Health**

Division of Eli Lilly and Company (NZ) Ltd.

www.elanco.co.nz 0800 352 626