

Parasite control guide 2024

A comprehensive list of products for the control of internal and external parasites in cattle and sheep



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Environmental considerations for anthelmintic and ectoparasiticide use

Encouraging a healthy population of invertebrates plays an important role in natural parasite reduction. However, many compounds used to treat or control pests and parasites have the potential to negatively impact invertebrates such as dung beetles, flies and aquatic fauna. This can occur when the active ingredients or their metabolites are excreted in the manure and/or urine of treated animals, or if the ingredients and their metabolites leach into the environment. Using medicines responsibly ensures products are used only when necessary, ideally supported by a diagnosis or a risk assessment that confirms the need, to protect animals from a genuine risk of disease. This approach, alongside correct storage, application and disposal of medicines, minimises the risks medicines pose to the environment.

SCOPS and COWS are working towards clear guidance to aid product choice decisions surrounding anthelmintics and ectoparasiticides and the environment. Initial advice is as follows:

- Animal health is critically important when a treatment decision is made.
 The choice of product should be discussed with the prescriber. The needs of the farm, including any environmental aspects, should be considered
- To minimise environmental risk, it is vital that products are used, stored and disposed of according to the label instructions
- The Summary of Product Characteristics (SPC) includes information on environmental risks. It is important to check the SPC and to follow any advice on precautions to minimise the risk of damage to the environment
- The activity of a medicine within the animal and the environment are not the same thing. The meat/milk withdrawal period of a product has no direct relationship to the risk to the environment
- Farmers, vets and SPQs/RAMAs should work together to reduce the risk
 of parasite infection in stock, with the emphasis on using as little product
 as possible but as much as necessary to protect the health and productivity
 of livestock. They should be fully informed about the potential environmental
 impacts and consider all aspects of sustainability, including optimising
 animal and environmental health

For more information, see **scops.org.uk** and **cattleparasites.org.uk**









Introduction

Parasite control - getting it right

Choosing the right product and getting the most from it are key factors in ensuring optimum livestock performance for the least cost and reducing the risk of anthelmintic resistance.

The aim of this booklet is to provide an accurate, easy-to-use reference guide on all available anti-parasitic products in their various chemical groups and summarise the parasites they have been licensed to control. Decisions on the choice of product should be discussed with your vet, SQP (Suitably Qualified Person) or RAMA (Responsible animal medicine advisor).

What type of wormer should be used?

Anthelmintics (wormers) are used to treat and prevent parasite infections – roundworm, tapeworm, lungworm and liver fluke. These products fall into the following groups:

- 1. (BZ) Benzimidazoles.
- 2. (LV) Levamisole (Imidazothiazoles).
- **3.** (ML) Macrocyclic lactones, including avermectins and milbemycins.
- 4. (AD) Amino acetonitrile derivatives (Monepantel).
- **5.** (SI) Spiroindoles (Derquantel available as a multi-active).

Anthelmintics belonging to these groups are active against the major species of gut roundworms and lungworms. Some will also have activity against liver fluke and tapeworms. ML (Group 3) injectables and pour-ons also have activity against some ectoparasites.

Other products are more specific in the parasites they will kill, i.e. narrow spectrum. Most anthelmintics in this category are active against liver fluke or ectoparasites.

Choosing the most appropriate product for the parasites likely, or known, to be present is vital. Targeting the right parasite will give predictable results and may mean retreatment is less likely to be needed.

This may also reduce unnecessary selection pressure for anthelmintic resistance.

Administering wormers (anthelmintics) effectively

When using any medicine or vaccine, it is important to read the product label and package insert to ensure you understand how it needs to be administered to the animal. If you do not understand something or need further information, ask your veterinary surgeon or SQP/RAMA.

- Choose the most appropriate product for the parasites likely, or known, to be present
- Store wormers in accordance with instructions, usually away from direct sunlight, avoiding extremes of temperature and keep in a fridge, if appropriate
- Always read the label before using each product to check it is suitable for the livestock you want to treat and note any precautions for its use

Only use a product before its expiry date and check how long it is usable after opening.

- Make sure the dosing equipment is compatible with the product you are using and check it is clean and measuring the correct volume
- Administer product according to the manufacturer's instructions, paying particular attention to specific methods for ear injections and intraruminal (rumen) boluses
- Dose according to liveweight, as detailed in the manufacturer's instructions. Weigh your animals to get an accurate weight
- Record accurately all wormer products administered (batch number, amount and expiry date), animal identity, treatment dates and withdrawal periods
- Note withdrawal periods for milk and meat, and ensure they are adhered to. Be aware that withdrawal periods do not relate to the length of activity of a product (this will be shown elsewhere on the label)

 Do not mix different wormers together or with other products, as this can inactivate active ingredients

Before using any product, even if you have used it before, read the product information on the packaging and/or the leaflet inside the pack.



For more information, consult the 'data sheet' or the 'summary of product characteristics' (SPC), which contains additional details and any recent changes to specifications, such as withdrawal periods.

SPCs can be found on **vmd.defra.gov.uk**; data sheets can be found on **noahcompendium.co.uk** and the NOAH Compendium app. Manufacturers can be contacted directly if these sources do not provide the information you are seeking.

For further information on treating dairy cows, contact AHDB Dairy at ahdb.org.uk/dairy or call 024 7669 2051.

Cattle parasite control – endoparasiticides and ectoparasiticides



(1-82) Group 1: Benzimidazoles (BZ) (White)

| Donatora | Company | Chemical | | | | Parasites co | ntrolled | | | | | 11-2 | Trace | Withdrawal | Milk |
|---|-----------------|--------------|-----------|----------|----------------------------------|------------------|----------|---------|------|-----------|---------|---------------------|----------|---------------|-----------|
| Product | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Mites | Warbles | Lice | Hornflies | Eyeworm | Use | elements | period (meat) | withhold |
| Albacert 2.5% SC | Downland | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | No | No | No | Oral drench | Co, Se | 14 days | 60 hours |
| Albex 10% oral suspension | Chanelle Pharma | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | No | No | No | Oral drench | | 14 days | 60 hours |
| Albex 2.5% SC oral suspension | Chanelle Pharma | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | No | No | No | Oral drench | Co, Se | 14 days | 60 hours |
| Autoworm Finisher | Zoetis | Oxfendazole | Yes | Yes | Yes | No | No | No | No | No | No | Pulse release bolus | | 6 months | X |
| Autoworm First Grazer | Zoetis | Oxfendazole | Yes | Yes | Yes | No | No | No | No | No | No | Pulse release bolus | | 8 months | Χ |
| Benzimole | Mole Valley | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | No | No | No | Oral drench | Co, Se | 14 days | 60 hours |
| Bovex 2.265% | Chanelle Pharma | Oxfendazole | Yes | Yes | Yes | No | No | No | No | No | No | Oral drench | | 19 days | 84 hours |
| Endospec 2.5% SC | Bimeda | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | No | No | No | Oral drench | Co, Se | 14 days | 60 hours |
| Endospec 10% SC | Bimeda | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | No | No | No | Oral drench | Co, Se | 14 days | 60 hours |
| Ovidrench S & C 2.5% w/v oral suspension for cattle | United Farmers | Albendazole | Yes | Yes | Yes – <i>Moniezia</i> spp. | Yes (adult only) | No | No | No | No | No | Oral drench | Co, Se | 14 days | 60 hours |
| Ovidrench S & C 10% w/v oral drench for cattle | United Farmers | Albendazole | Yes | Yes | Yes – <i>Moniezia</i> spp. | Yes (adult only) | No | No | No | No | No | Oral drench | Co, Se | 14 days | 60 hours |
| Panacur bolus | MSD AH | Fenbendazole | Yes | Yes | No | No | No | No | No | No | No | Bolus | | 200 days | X |
| Panacur 10% oral suspension | MSD AH | Fenbendazole | Yes | Yes | Yes | No | No | No | No | No | No | Oral drench | | 12 days | 120 hours |
| Tramazole 2.5% SC | Tulivin Labs | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | No | No | No | Oral drench | Co, Se | 14 days | 60 hours |
| Tramazole 10% SC | Tulivin Labs | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | No | No | No | Oral drench | Co, Se | 14 days | 60 hours |
| Zerofen 2.5% | Chanelle Pharma | Fenbendazole | Yes | Yes | No | No | No | No | No | No | No | Oral drench | | 14 days | 132 hours |
| Zerofen 10% | Chanelle Pharma | Fenbendazole | Yes | Yes | No | No | No | No | No | No | No | Oral drench | | 14 days | 132 hours |

Group 2: Levamisole (LV) (Yellow)

| Product | Company | Chemical | | | | Parasites co | ontrolled | | | | | Use | Trace | Withdrawal | Milk |
|--------------------------------------|-----------------|------------|-----------|----------|----------|--------------|-----------|---------|------|-----------|---------|--------------|----------|---------------|----------|
| Floduct | name | name | Roundworm | Lungworm | Tapeworm | Fluke | Mites | Warbles | Lice | Hornflies | Eyeworm | | elements | period (meat) | withhold |
| Chanaverm 7.5% | Chanelle Pharma | Levamisole | Yes | Yes | No | No | No | No | No | No | No | Oral drench | | 20 days | Χ |
| Levacide 7.5% solution for injection | Norbrook Labs | Levamisole | Yes | Yes | No | No | No | No | No | No | No | Injection SC | | 28 days | X |
| Levacide low volume 7.5% | Norbrook Labs | Levamisole | Yes | Yes | No | No | No | No | No | No | No | Oral drench | | 14 days | Χ |
| Levacur SC 3% | MSD AH | Levamisole | Yes | Yes | No | No | No | No | No | No | No | Oral drench | Co, Se | 20 days | Χ |
| Levamole | Mole Valley | Levamisole | Yes | Yes | No | No | No | No | No | No | No | Oral drench | | 20 days | Χ |

Check product labels for full and final details

X = not for use in cattle producing milk for human consumption.



Group 3: Macrocyclic Lactones (ML) (Clear)

| Donalisak | Company | Chemical | | | | Paras | ites controll | ed | | | | Ues | Withdrawal | Milk |
|--|-------------------------|--------------|-----------|----------|----------|-------------|---------------|---------|------|-----------|---------|---------------|---------------|-----------|
| Product | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Mites | Warbles | Lice | Hornflies | Eyeworm | Use | period (meat) | withhold |
| Animec 10 mg/ml solution for injection | Chanelle Pharma | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | No | Injection SC | 49 days | 60* days |
| Animec pour-on 0.5% | Chanelle Pharma | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Pour-on | 28 days | 60* days |
| Bimectin injection | Bimeda | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Injection SC | 49 days | Χ |
| Bimectin pour-on for cattle | Bimeda | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 31 days | Χ |
| Bimeprine 5 mg/ml pour-on solution for cattle | Bimeda | Eprinomectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 15 days | Zero |
| Cydectin 0.5% pour-on for cattle | Zoetis | Moxidectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 14 days | 6 days |
| Cydectin 10% LA for cattle | Zoetis | Moxidectin | Yes | Yes | No | No | Yes | Yes | Yes | No | No | Ear injection | 108 days | 80* days |
| Dectomax 10 mg/ml solution for injection for cattle and sheep | Elanco AH | Doramectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Injection SC | 70 days | Χ |
| Dectomax pour-on | Elanco AH | Doramectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Pour-on | 35 days | Χ |
| Doramax 5 mg/ml pour-on solution for cattle | Chanelle Pharma | Doramectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Pour-on | 35 days | 60* days |
| Ecomectin 10 mg/ml solution for injection | ECO AH | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Injection SC | 49 days | Χ |
| Ecomectin 5 mg/ml pour-on solution for cattle | ECO AH | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 31 days | Χ |
| Eprecis 20 mg/ml solution for injection for cattle | Ceva AH | Eprinomectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Injection SC | 63 days | Zero |
| Epricert 5 mg/ml pour-on solution for beef and dairy cattle | Chanelle Pharma | Eprinomectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 15 days | Zero |
| EpriMole pour-on | Mole Valley | Eprinomectin | Yes | Yes | No | No | Yes | Yes | Yes | No | No | Pour-on | 15 days | Zero |
| Eprinex pour-on | Boehringer Ingelheim | Eprinomectin | Yes | Yes | No | No | Yes | Yes | Yes | No | No | Pour-on | 15 days | Zero |
| Eprinex multi 5 mg/ml pour-on for beef and dairy cattle, sheep and goats | Boehringer Ingelheim | Eprinomectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 15 days | Zero |
| Eprizero pour-on | Norbrook Labs | Eprinomectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 10 days | Zero |
| Epromec 5 mg/ml pour-on solution for beef and dairy cattle | Chanelle Pharma | Eprinomectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 15 days | Zero |
| Ivomec classic injection for cattle and sheep | Boehringer Ingelheim | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Injection SC | 49 days | 60* days |
| Ivomec classic pour-on for cattle | Boehringer Ingelheim | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Pour-on | 15 days | 60* days |
| Molemac injection | Mole Valley | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Injection SC | 49 days | Χ |
| Molemec pour-on for cattle | Mole Valley | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Pour-on | 15 days | 60* days |
| Moxodex 5 mg/ml | Chanelle Pharma | Moxidectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 14 days | 144 hours |
| Neoprinil 5 mg/ml pour-on solution for cattle | Virbac | Eprinomectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 15 days | Zero |

^{*}Not permitted for use in cattle producing milk for human consumption or industrial purposes, or in dry cows and pregnant heifers within stated days before calving (check specific details). X = not for use in cattle producing milk for human consumption.

Check product labels for full and final details

Check the datasheets of individual products for mite species activity as it does vary.



| Product | Company | Chemical | | | | Paras | ites controll | ed | | | | Use | Withdrawal | Milk |
|--|-------------------------|------------|-----------|----------|----------|-------------|---------------|---------|------|-----------|---------|---------------|---------------|----------|
| Floduct | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Mites | Warbles | Lice | Hornflies | Eyeworm | USE | period (meat) | withhold |
| Noromectin multi injection | Norbrook Labs | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Injection SC | 49 days | 60* days |
| Noromectin pour-on | Norbrook Labs | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Pour-on | 28 days | 60* days |
| Panomec injection for cattle, sheep and pigs | Boehringer Ingelheim | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Injection SC | 49 days | 60* days |
| Paramectin multi injection | Norbrook Labs | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Injection SC | 49 days | 60* days |
| Paramectin pour-on | Norbrook Labs | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Pour-on | 28 days | 60* days |
| Premadex injection | Downland | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | No | Yes | Injection SC | 49 days | 60* days |
| Premadex pour-on | Downland | Ivermectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Pour-on | 28 days | 60* days |
| Taurador | Norbrook Labs | Doromectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Pour-on | 35 days | 60* days |
| Zermex 0.5% pour-on for cattle | Downland | Moxidectin | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Pour-on | 14 days | 6 days |
| Zermex 100 mg/ml LA for cattle | Downland | Moxidectin | Yes | Yes | No | No | Yes | Yes | Yes | No | No | Ear injection | 108 days | 80* days |

Combination products

| Durahasi | Company | Chemical | | | | Parasites con | trolled | | | | | Use | Withdrawal | Milk |
|-----------------------------------|-------------------------|-------------------------------|-----------|----------|----------|---------------------------------------|---------|---------|------|-----------|---------|--------------|---------------|----------|
| Product | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Mites | Warbles | Lice | Hornflies | Eyeworm | Use | period (meat) | withhold |
| Animec super injection for cattle | Chanelle Pharma | Ivermectin Clorsulon | Yes | Yes | No | Yes (adult only) | Yes | Yes | Yes | No | Yes | Injection SC | 66 days | 60* days |
| Bimectin plus injection | Bimeda | Ivermectin Clorsulon | Yes | Yes | No | Yes (adult only) | Yes | Yes | Yes | No | Yes | Injection SC | 66 days | 60* days |
| Closamectin pour-on | Norbrook Labs | Ivermectin Closantel | Yes | Yes | No | Yes (adult and immature over 7 weeks) | Yes | Yes | Yes | No | Yes | Pour-on | 58 days | Χ |
| Combinex cattle | Elanco AH | Levamisole Triclabendazole | Yes | Yes | No | Yes – all stages | No | No | No | No | No | Oral drench | 56 days | Χ |
| Cydectin TriclaMox | Zoetis | Moxidectin Triclabendazole | Yes | Yes | No | Yes (adult and immature 6–8 weeks) | No | No | Yes | No | No | Pour-on | 143 days | Χ |
| Downland Fluke & Worm | Downland | Levamisole Oxyclozanide | Yes | Yes | No | Yes (adult only) | No | No | No | No | No | Oral drench | 5 days | Χ |
| Ivomec super injection for cattle | Boehringer Ingelheim | Ivermectin Clorsulon | Yes | Yes | No | Yes (adult only) | Yes | Yes | Yes | No | Yes | Injection SC | 66 days | 60* days |
| Levafas Diamond | Norbrook Labs | Levamisole Oxyclozanide | Yes | Yes | No | Yes (adult only) | No | No | No | No | No | Oral drench | 5 days | Χ |
| Molemec super injection | Mole Valley | Ivermectin Clorsulon | Yes | Yes | No | Yes (adult only) | Yes | Yes | Yes | No | Yes | Injection SC | 66 days | 60* days |
| Norofas | Downland | Ivermectin Closantel | Yes | Yes | No | Yes (adult and immature over 7 weeks) | Yes | Yes | Yes | No | Yes | Pour-on | 58 days | Χ |
| Supremadex | Downland | Ivermectin Clorsulon | Yes | Yes | No | Yes (adult only) | Yes | Yes | Yes | No | Yes | Injection SC | 66 days | 60* days |
| Virbamec Super | Virbac | Ivermectin Clorsulon | Yes | Yes | No | Yes (adult only) | Yes | Yes | Yes | No | No | Injection SC | 66 days | 60* days |

^{*}Not permitted for use in cattle producing milk for human consumption or industrial purposes, or in dry cows and pregnant heifers within stated days before calving (check specific details).

Check product labels for full and final details

Check the datasheets of individual products for mite species activity as it does vary.



Flukicides

| Product | Company | Chemical | | | | Parasites controlled | | | | | | Use | Withdrawal | Milk |
|---|--------------------|-----------------|-----------|----------|---|---------------------------------------|-------|---------|------|-----------|---------|-------------|---------------|---------------|
| Product | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Mites | Warbles | Lice | Hornflies | Eyeworm | USE | period (meat) | withhold |
| Endofluke 10% | Bimeda | Triclabendazole | No | No | No | Yes – all stages | No | No | No | No | No | Oral drench | 56 days | 47* days |
| Fasinex 240 | Elanco AH | Triclabendazole | No | No | No | Yes – all stages | No | No | No | No | No | Oral drench | 52 days | 50* days |
| Rumenil 34 mg/ml oral suspension for cattle | Chanelle Pharma | Oxyclozanide | No | No | Yes – <i>Moniezia</i> spp. segments only | Yes (adult only) | No | No | No | No | No | Oral drench | 13 days | 108 hours |
| Solantel pour-on | Norbrook Labs | Closantel | No | No | No | Yes (adult and immature over 7 weeks) | No | No | No | No | No | Pour-on | 63 days | X |
| Tribex 10% oral suspension for cattle | Chanelle Pharma | Triclabendazole | No | No | No | Yes – all stages | No | No | No | No | No | Oral drench | 56 days | 41 + 3.5 days |
| Triclacert 10% | Downland | Triclabendazole | No | No | No | Yes – all stages | No | No | No | No | No | Oral drench | 56 days | 41 + 3.5 days |
| Zanil | MSD AH | Oxyclozanide | No | No | No | Yes (adult only) | No | No | No | No | No | Oral drench | 13 days | 108 hours |

Ectoparasiticides – synthetic pyrethroids

| Product | Company | Chemical | | | | | Parasites | controlled | | | | | Use | Withdrawal | Milk |
|--|----------------|-------------------|-----------|----------|----------|-------------|-----------|------------|------|-------|-----------|---------|---------|---------------|----------|
| Product | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Mites | Warbles | Lice | Flies | Hornflies | Eyeworm | Use | period (meat) | withhold |
| Butox Swish | MSD AH | Deltamethrin | No | No | No | No | No | No | Yes | Yes | Yes | No | Pour-on | 20 days | Zero |
| Dectospot 10 mg/ml spot-on solution for cattle | Bimeda | Deltamethrin | No | No | No | No | No | No | Yes | Yes | Yes | No | Spot-on | 17 days | Zero |
| Deltanil cattle and sheep | Virbac | Deltamethrin | No | No | No | No | No | No | Yes | Yes | Yes | No | Pour-on | 17 days | Zero |
| Deltamole | Mole Valley | Deltamethrin | No | No | No | No | No | No | Yes | Yes | Yes | No | Pour-on | 20 days | Zero |
| Dysect cattle pour-on | Zoetis | Alphacypermethrin | No | No | No | No | No | No | Yes | Yes | Yes | No | Pour-on | 28 days | Zero |
| Flectron fly tags | Zoetis | Cypermethrin | No | No | No | No | No | No | No | Yes | Yes | No | Ear tag | Zero | Zero |
| Flypor | Elanco AH | Permethrin | No | No | No | No | Yes | No | Yes | Yes | Yes | No | Pour-on | 3 days | 6 hours |
| Fly & lice spot-on insecticide | Zoetis | Deltamethrin | No | No | No | No | No | No | Yes | Yes | Yes | No | Spot-on | 17 days | Zero |
| Flydown | Downland | Deltamethrin | No | No | No | No | No | No | Yes | Yes | Yes | No | Spot-on | 17 days | Zero |
| Spotinor 10 mg/ml | Norbrook | Deltamethrin | No | No | No | No | No | No | Yes | Yes | Yes | No | Spot-on | 17 days | Zero |

Ectoparasiticides - miscellaneous

| Product | Company | Chemical name | | | | | Parasites | controlled | | | | | Use | Withdrawal |
|---------------------------------------|--------------------------|--|-----------|----------|----------|-------|-----------|------------|------|-------|-----------|---------|-------------------|---------------|
| Floudet | name | Chemica name | Roundworm | Lungworm | Tapeworm | Fluke | Mites | Warbles | Lice | Flies | Hornflies | Eyeworm | USE | period (meat) |
| Horse & cattle fly repellent – liquid | Battle Hayward and Bower | Diethyltoluamide p-Menthane-3, 8-diol | No | No | No | No | No | No | No | Yes | No | No | Topical lotion | Zero |

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Check product labels for full and final details

Check the datasheets of individual products for mite species activity as it does vary.

X = not for use in cattle producing milk for human consumption.

Cattle treatment best practice





Dosing cattle correctly

Whichever method of administration is selected, it is important to read the manufacturer's instructions carefully. Particular attention should be paid to:

- Class of stock for which the drug is recommended and any limitations regarding use
- Dose rate and any recommended increases to deal with different parasite species or developmental stages
- Meat withholding period before slaughter
- · Body weight assessment to avoid underdosing

- Dose according to individual liveweight, using scales or a weigh band. For a group of well-matched cattle, it's acceptable to weigh a sample of animals and treat the group accordingly
- Correct storage of wormers, i.e. away from direct sunlight, avoiding extremes of temperature. Check the use-by date and, once open, use within the time shown on the packaging. Some products need to be shaken well before use
- Ensure that the equipment is appropriate for the product and is calibrated to deliver the dose accurately. After use, rinse, clean and then dry the equipment before storage

Pour-ons

These should be applied along the length of the flattest part of the animal's back, from the withers to the tail head.

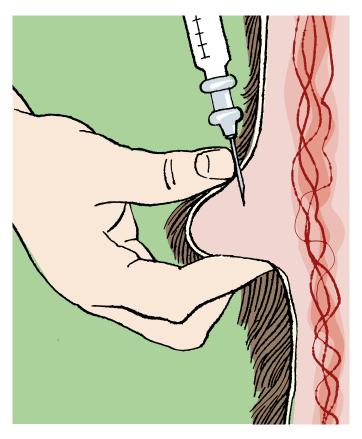
In general, animals should not be treated when the hair is wet or if rain is anticipated within two hours of treatment. However, some products are waterproof and can be used on wet animals. Areas of damaged skin should be avoided, as should areas contaminated with mud or manure.

Injectables

Injectables should be given according to the manufacturer's instructions at the recommended injection site.

- Always use a clean, sterile syringe and needle.
 If using a multiple injection gun, ensure the needle is disinfected between injections, e.g. with an automatic sterilisation system
- If the site to be injected is dirty, clean the skin and swab with an alcohol-impregnated wipe or cotton wool
- Before injecting, check the expiry date and read the instructions of the product to be used.
 Some products need to be shaken before use
- Use the correct-sized needle according to the size of the animal and site of injection

- Ensure the animal is adequately restrained before attempting the injection
- Take care to ensure it is given subcutaneously and not intramuscularly. Raise a fold of skin at the injection site (mainly neck, but some are ear) recommended by the product manufacturer and inject carefully into the space created
- If a large dose is to be delivered, it may be advisable to split the dose between two injection sites. After the injection, briefly massage the site to improve the dispersal of the injected material
- Dispose of the needle and syringe in appropriate clinical waste and sharps containers

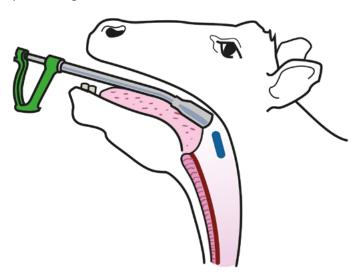




Boluses

These types of wormers are administered orally using product-specific equipment.

Closely follow the manufacturer's instructions to ensure that the boluses are delivered over the back of the tongue, so they can be swallowed. Avoid any excess force, as this can cause damage to the throat, and do not depress the plunger until you are satisfied with the positioning of the bolus.



It is important that the animal stays as calm as possible and can swallow. This is normally achieved by keeping the head and neck in a straight line. It is very difficult to successfully and safely complete administration if the neck is twisted and the animal is fighting you.

Oral drenches

Oral drenching guns are designed to deliver the treatment towards the back of the mouth over the tongue, so the entire dose is swallowed at once to optimise efficacy.

- Make sure animals are properly restrained, with their head held up
- Slide the nozzle of the dosing gun into the side of the mouth and over the tongue so that the entire dose is swallowed immediately
- Drenching equipment must be correctly calibrated and in good working order
- Calibrate the gun using the product just before treatment starts by delivering two or more doses into a graduated measuring cylinder

Faulty equipment, or attempting to dose too quickly, may mean that the barrel of the gun does not fill properly or that the liquid is full of bubbles, which may lead to underdosing.

Storage

Wormers should be stored securely, away from direct sunlight, at 4–25°C. Check the use-by date and, once open, use within the time shown on the packaging. Shake white (BZ) products well before use.

The product may be compromised by incorrect storage.





What type of anthelmintic should be used?

| Parasite | Treatment advice | Product notes |
|---|---|---|
| Gutworms, e.g. Ostertagia and Cooperia | Worming can break the life cycle of gutworms where cattle are grazing infected pastures. Treatments should aim to limit disease and minimise pasture contamination. At housing of first- and second-year grazing animals, it is important to choose cattle anthelmintics (commonly known as wormers) that are effective against inhibited fourth-stage <i>Ostertagia ostertagi</i> larvae that can cause type II ostertagiasis (resulting from the emergence of thousands of inhibited larvae, from the wall of the fourth stomach) – a serious, potentially fatal disease known as winter scour. | Macrocyclic lactone (ML) products are active against inhibited larvae. Benzimidazoles may also be used, but their efficacy against inhibited larvae can be unpredictable. Levamisole is ineffective against larval <i>O. ostertagi</i> . |
| Lungworm | Lungworm infection (husk) usually occurs in youngstock during the second half of the grazing season. Without good lungworm control, cattle may be more susceptible to pneumonia after housing. Routine vaccination should be considered for calves born into herds with an identified lungworm problem or when there is a previous history of lungworm on the farm. Anthelmintics can be used strategically in first-year grazing cattle to prevent build-up of larvae on pasture over the grazing season. | If considering using a lungworm vaccine, take veterinary advice to ensure correct use. Care is required to avoid using wormers for a number of weeks before and after vaccine administration. Avoid vaccination during the period of activity of long-acting anthelmintics, endectocides or long-acting bolus preparations, and do not use any anthelmintics or endectocides for 14 days after vaccination. |
| Liver fluke | Treatment for fluke should take account of the particular risk, time of year and the stage of development of the fluke. This should be discussed with your adviser. If rumen fluke are suspected, discuss options with your vet, as treatment is not always required, few products are effective and the dose rate may need to be adjusted. | Different products will kill different ages of fluke, so product selection is important. There have been reports of triclabendazole resistance, so, where appropriate, other products should be used. |
| Ectoparasites, e.g. lice, mange, ticks, flies | Spread of lice and mange is by close contact and occurs most frequently during the winter months when cattle are housed. Low levels of ectoparasite infection can be tolerated. Where heavy infestations occur, all in-contact cattle should be treated. | Ectoparasites can be controlled with synthetic pyrethroid products or MLs (avermectins and milbemycins). The range of ectoparasites controlled differs among formulations, so it is important to read the label for each product before use and get appropriate advice. |
| Rumen fluke | The detection of rumen fluke eggs only indicates the presence of adults in the rumen. In the majority of cases, it does not indicate any production loss nor any action is required. Co-infections of liver fluke and rumen fluke are common, but any treatment should focus on the presence of liver fluke. | There are no licensed treatments for rumen fluke and the only active ingredient that can kill them (oxyclozanide) has a low safety margin and must be used carefully. |
| | Disease due to rumen fluke is not typically caused by adults in the rumen. It is due to a large build-up of immature rumen fluke in the duodenum and is the result of a very high challenge on pasture, leading to large numbers of immature parasites in the intestine. If you are concerned about rumen fluke, discuss results with your vet. | Oxyclozanide can only be prescribed by a veterinary surgeon for use against rumen fluke and should only be used where there is conclusive evidence that an infestation of rumen fluke is likely to be causing a health/welfare issue. |

Products that combine a wormer and flukicide can seem like an attractive option for broad-spectrum control with a single administration. It is recommended that they are only used if the following apply:

- Cattle require treatment for both worms and fluke
- The wormer is effective against the stages of the target worms present and the value of any persistent activity is assessed
- The flukicide has the appropriate activity for the stages of liver fluke likely to be present

To ensure you choose the right product and administer it in the right way, consult your vet or SQP/RAMA for more detailed advice.

Sheep parasite control – endoparasiticides and ectoparasiticides



Group 1: Benzimidazoles (BZ) (White)

| Product | Company | Chemical | | | Parasites co | ntrolled | | | Use | Trace | Withdrawal | Withdrawal |
|--|-----------------|---------------|-----------|----------|----------------------------|------------------|------------|------------|-------------|----------|---------------|---------------|
| Product | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Nasal bots | Sheep scab | Use | elements | period (meat) | period (milk) |
| Albacert | Downland | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | Oral drench | Co, Se | 5 days | Χ |
| Albex 2.5% SC | Chanelle Pharma | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | Oral drench | Co, Se | 5 days | Χ |
| Albex 10% | Chanelle Pharma | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | Oral drench | | 5 days | Χ |
| Benzimole | Mole Valley | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | Oral drench | Co, Se | 5 days | Χ |
| Bovex 2.265% | Chanelle Pharma | Oxfendazole | Yes | Yes | Yes | No | No | No | Oral drench | | 24 days | Χ |
| Endospec SC 2.5% | Bimeda | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | Oral drench | Co, Se | 4 days | Χ |
| Endospec 10% SC | Bimeda | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | Oral drench | Co, Se | 4 days | Χ |
| Ovidrench S & C 2.5% w/v oral suspension | United Farmers | Albendazole | Yes | Yes | Yes – <i>Moniezia</i> spp. | Yes (adult only) | No | No | Oral drench | Co, Se | 4 days | Χ |
| Ovidrench S & C 10% w/v oral suspension | United Farmers | Albendazole | Yes | Yes | Yes – <i>Moniezia</i> spp. | Yes (adult only) | No | No | Oral drench | Co, Se | 4 days | Χ |
| Panacur 10% oral suspension | MSD AH | Fenbendazole | Yes | Yes | Yes | No | No | No | Oral drench | | 15 days | 7 days |
| Rycoben SC 2.5% oral suspension | Elanco AH | Ricobendazole | Yes | Yes | Yes | Yes (adult only) | No | No | Oral drench | Co, Se | 3 days | Χ |
| Tramazole 2.5% SC | Tulivin Labs | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | Oral drench | Co, Se | 4 days | Χ |
| Tramazole 10% SC | Tulivin Labs | Albendazole | Yes | Yes | Yes | Yes (adult only) | No | No | Oral drench | Co, Se | 4 days | Χ |
| Zerofen 2.5% | Chanelle Pharma | Fenbendazole | Yes | Yes | Yes | No | No | No | Oral drench | | 21 days | Χ |
| Zerofen 10% | Chanelle Pharma | Fenbendazole | Yes | Yes | Yes | No | No | No | Oral drench | | 21 days | Χ |

Group 2: Levamisole (LV) (Yellow)

| Product | Company | Chemical | | | Parasites co | ntrolled | | | Use | Trace | Withdrawal | Withdrawal |
|--------------------------------------|-----------------|------------|-----------|----------|--------------|-------------|------------|------------|--------------|----------|---------------|---------------|
| Floudet | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Nasal bots | Sheep scab | | elements | period (meat) | period (milk) |
| Chanaverm 7.5% | Chanelle Pharma | Levamisole | Yes | Yes | No | No | No | No | Oral Drench | | 20 days | Χ |
| Levacide 7.5% solution for injection | Norbrook Labs | Levamisole | Yes | Yes | No | No | No | No | Injection SC | | 15 days | Χ |
| Levacide low volume | Norbrook Labs | Levamisole | Yes | Yes | No | No | No | No | Oral Drench | | 21 days | Χ |
| Levacur SC 3% | MSD AH | Levamisole | Yes | Yes | No | No | No | No | Oral Drench | Co, Se | 20 days | Χ |
| Levamole | Mole Valley | Levamisole | Yes | Yes | No | No | No | No | Oral Drench | | 20 days | Χ |

X = not for use in sheep producing milk for human consumption.

Check product labels for full and final details



Group 3: Macrocyclic Lactones (ML) (Clear)

| Product | Company | Chemical | | | Paras | ites controlled | | | Use | Withdrawal | Withdrawal |
|--|-------------------------|-------------------------------|-----------|----------|----------|---|------------|------------|---------------|---------------|---------------|
| Product | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Nasal bots | Sheep scab | Use | period (meat) | period (milk) |
| Animec oral for sheep | Chanelle Pharma | Ivermectin | Yes | Yes | No | No | Yes | No | Oral drench | 10 days | Χ |
| Bimectin | Bimeda | Ivermectin | Yes | Yes | No | No | Yes | No | Injection SC | 42 days | Χ |
| Cydectin 0.1% oral | Zoetis | Moxidectin | Yes | Yes | No | No | No | No | Oral drench | 14 days | 120 hours |
| Cydectin 1% injection* | Zoetis | Moxidectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 70 days | X |
| Cydectin 20 mg/ml LA injection | Zoetis | Moxidectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 104 days | Χ |
| Dectomax 10 mg/ml solution for injection | Elanco AH | Doramectin | Yes | Yes | No | No | Yes | Yes | Injection I/M | 70 days | Χ |
| Ecomectin 10 mg/ml solution for injection | ECO AH | Ivermectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 42 days | Χ |
| Eprecis 20 mg/ml solution for injection | CEVA | Eprinomectin | Yes | Yes | No | No | No | No | Injection SC | 42 days | Zero |
| Eprinex Multi 5 mg/ml pour-on for beef and dairy cattle, sheep and goats | Boehringer Ingelheim | Eprinomectin | Yes | Yes | No | No | No | No | Pour-on | 2 days | Zero |
| Ivomec Classic injection for cattle and sheep | Boehringer Ingelheim | Ivermectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 37 days | Χ |
| Molemec drench for sheep | Mole Valley | Ivermectin | Yes | Yes | No | No | Yes | No | Oral drench | 6 days | Χ |
| Molemec injection for cattle and sheep | Mole Valley | Ivermectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 37 days | Χ |
| Moxodex Oral | Chanelle Pharma | Moxidectin | Yes | Yes | No | No | No | No | Oral drench | 14 days | 120 hours |
| Noromectin drench | Norbrook Labs | Ivermectin | Yes | Yes | No | No | Yes | No | Oral drench | 14 days | Χ |
| Noromectin multi injection | Norbrook Labs | Ivermectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 42 days | Χ |
| Oramec drench | Boehringer Ingelheim | Ivermectin | Yes | Yes | No | No | Yes | No | Oral drench | 6 days | Χ |
| Panomec injection for cattle, sheep and pigs | Boehringer Ingelheim | Ivermectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 37 days | Χ |
| Paramectin multi injection | Norbrook Labs | Ivermectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 42 days | Χ |
| Paramectin drench | Norbrook Labs | Ivermectin | Yes | Yes | No | No | Yes | No | Oral drench | 14 days | Χ |
| Premadex 1% injection | Downland | Ivermectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 42 days | Χ |
| Premadex injection | Downland | Ivermectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 42 days | Χ |
| Premadex drench | Downland | Ivermectin | Yes | Yes | No | No | Yes | No | Oral drench | 10 days | Χ |
| Tribamec Duo | Chanelle Pharma | Ivermectin Triclabendazole | Yes | Yes | No | Yes – including immature fluke from under 1 week of age | Yes | No | Oral drench | 27 days | Х |
| Zermex drench | Downland | Moxidectin | Yes | Yes | No | No | No | No | Oral drench | 14 days | 120 hours |
| Zermex 20 mg/ml LA for injection | Downland | Moxidectin | Yes | Yes | No | No | Yes | Yes | Injection SC | 104 days | Χ |

I/M = intramuscular, SC = subcutaneous

X = not for use in sheep producing milk for human consumption.

Check product labels for full and final details

For the treatment of sheep scab, two injections may be required.

^{*}Not to be used in any animals that have any history of previous vaccination against footrot.



Group 4: Amino Acetonitrile Derivatives (AD) (Orange)

| Product | Company | Chemical | | | Parasites | controlled | | | - Use | Withdrawal |
|---------|-----------|------------|-----------|----------|-----------|-------------|------------|------------|-------------|---------------|
| Floudet | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Nasal bots | Sheep scab | | period (meat) |
| Zolvix | Elanco AH | Monepantel | Yes | No | No | No | No | No | Oral drench | 7 days |

Group 5: Spiroindoles (SI) available as a multi-active (Purple)

| Product | Company | Chemical | | | Parasites controlled | | | | Use | Withdrawal |
|----------------------|---------|----------------------|-----------|----------|----------------------|-------------|------------|------------|-------------|---------------|
| Floudet | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Nasal bots | Sheep scab | | period (meat) |
| Startect dual active | Zoetis | Derquantel Abamectin | Yes | Yes | No | No | No | No | Oral drench | 14 days |

Combination products

| Product | Company Chemical | | Parasites controlled | | | | | | | Withdrawal | |
|--------------------------|------------------|----------------------------|----------------------|----------|----------|---|------------|------------|-------------|---------------|--|
| Floudet | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Nasal bots | Sheep scab | Use | period (meat) | |
| Combinex sheep | Elanco AH | Levamisole Triclabendazole | Yes | Yes | No | Yes – including immature fluke from 2 days of age | No | No | Oral drench | 56 days | |
| Cydectin TriclaMox | Zoetis | Moxidectin Triclabendazole | Yes | Yes | No | Yes – including early immature fluke | No | No | Oral drench | 31 days | |
| Downland Fluke & Worm | Downland | Levamisole Oxyclozanide | Yes | Yes | No | Yes (adults only) | No | No | Oral drench | 5 days | |
| Fasimec Duo | Elanco AH | Ivermectin Triclabendazole | Yes | Yes | No | Yes – including immature fluke from under 1 week of age | Yes | No | Oral drench | 27 days | |
| Levafas Diamond | Norbrook Labs | Levamisole Oxyclozanide | Yes | Yes | No | Yes (adults only) | No | No | Oral drench | 5 days | |
| Supaverm oral suspension | Elanco AH | Mebendazole Closantel | Yes | Yes | Yes | Yes (including immature fluke over 5 weeks of age) | No | No | Oral drench | 65 days | |

I/M = intramuscular, SC = subcutaneous

Note: Lice - endectocides do not cover biting (chewing) lice, which are the species of importance in the UK.

None of the products listed on this page are licensed for sheep producing milk for human consumption.

Check product labels for full and final details

Products to control sheep scab require a second injection of an ivermectin seven days.



Narrow spectrum

| Product | Company | Chemical | Parasites controlled | | | | | | | Use | Withdrawal |
|---------------------------------|-----------------|-----------------|----------------------|----------|----------|---|-------------|------------|------------|------|---------------|
| Product | name | name | Roundworm | Lungworm | Tapeworm | Liver fluke | Mange mites | Nasal bots | Sheep scab | Use | period (meat) |
| Endofluke 10% | Bimeda | Triclabendazole | No | No | No | Yes – including immature fluke | No | No | No | Oral | 56 days |
| Fasinex 5% | Elanco AH | Triclabendazole | No | No | No | Yes – including immature fluke from 2 days of age | No | No | No | Oral | 56 days |
| Flukanide | Univet Ltd | Rafoxanide | No | No | No | Yes (adult only) | No | No | No | Oral | 78 days |
| Flukiver 5% w/v oral suspension | Elanco AH | Closantel | No | No | No | Yes – including immature fluke over 5 weeks of age Haemonchus Contortus* | No | Yes | No | Oral | 42 days |
| Solantel | Norbrook | Closantel | No | No | No | Yes – including immature fluke over 5 weeks of age. Haemonchus Contortus* | No | Yes | No | Oral | 42 days |
| Tribex 5% | Chanelle Pharma | Triclabendazole | No | No | No | Yes – including immature fluke | No | No | No | Oral | 56 days |
| Triclacert 5% | Downland | Triclabendazole | No | No | No | Yes – including immature fluke | No | No | No | Oral | 56 days |
| Zanil | MSD AH | Oxyclozanide | No | No | No | Yes (adult only) | No | No | No | Oral | 14 days |

^{*}Barber's pole worm

Injectables for sheep scab

| Product | Company name | Chemical name | Sheep scab | Nasal bots | Withdrawal period (meat) | Move to clean pasture |
|---|----------------------|------------------|---|---------------|-----------------------------|--------------------------|
| Cydectin 1% injection* | Zoetis | Moxidectin | 28 days persistent activity for protection. Two injections 10 days apart to treat existing scab | Yes | 70 days | No |
| Cydectin 20 mg/ml LA injection | Zoetis | Moxidectin | 60 days persistent activity for protection. One injection to treat existing scab | Yes | 104 days | No |
| Dectomax 10 mg/ml solution for injection for cattle and sheep | Elanco AH | Doramectin | One injection | Yes | 70 days | Yes |
| Ecomectin 10 mg/ml solution for injection | ECO AH | Ivermectin | Two injections 7 days apart | Yes | 42 days | Yes |
| Ivomec Classic injection for cattle and sheep | Boehringer Ingelheim | Ivermectin | Two injections 7 days apart | Yes | 37 days | Yes |
| Molemac injection | Mole Valley | Invermectin | Two injections 7 days apart | Yes | 37 days | No |
| Noromectin multi injection | Norbrook Labs | Ivermectin | Two injections 7 days apart | Yes | 42 days | Yes |
| Panomec injection for cattle, sheep and pigs | Boehringer Ingelheim | Ivermectin | Two injections 7 days apart | Yes | 37 days | Yes |
| Paramectin multi injection | Norbrook Labs | Ivermectin | Two injections 7 days apart | Yes | 42 days | Yes |
| Premadex 1% injection | Downland | Ivermectin | Two injections 7 days apart | Yes | 42 days | Yes |
| Zermex 20 mg/ml LA for injection | Downland | Moxidectin | 60 days persistent activity for protection. One injection to treat | Yes | 104 days | No |

None of the products listed on this page are licensed for sheep producing milk for human consumption.

Check product labels for full and final details

^{*}Not to be used in any animals that have any history of previous vaccination against footrot.



Plunge dips

| Product | Company name | Chemical name | Blowfly | Sheep scab | Lice | Ticks | Withdrawal period (meat) |
|-------------------------|-----------------|------------------|--------------------|--------------------|--------------------|-------|-----------------------------|
| Osmonds Gold Fleece Dip | Bimeda | Diazinon | 60 days protection | 60 days protection | 60 days protection | Yes | 49 days |

Pour-ons

| Product | Company name | Chemical name | Blowfly | Lice | Ticks | Withdrawal period (meat) |
|---------------------------|-----------------|-------------------|--------------------------------|---------------------------------|----------------|-----------------------------|
| CLiK | Elanco AH | Dicyclanil (IGR) | 16 weeks P | No | No | 40 days |
| CLIK EXTRA | Elanco AH | Dicyclanil (IGR) | 19 weeks P | No | No | 40 days |
| CLiKZiN | Elanco AH | Dicyclanil (IGR) | 8 weeks P | No | No | 7 days |
| Crovect | Elanco AH | Cypermethrin | 6–8 weeks P+T | Kills existing lice | Up to 10 weeks | 8 days |
| Dectospot 10 mg/ml | Bimeda | Deltamethrin | Treats established strike only | 4-6 week reduction in incidence | Up to 6 weeks | 35 days |
| Deltanil cattle and sheep | Virbac | Deltamethrin | Treats established strike only | 4-6 week reduction in incidence | Up to 6 weeks | 35 days |
| Dysect | Zoetis | Alphacypermethrin | 8-10 weeks P+T | Kills existing lice | 8-12 weeks | 49 days |
| Ectofly 12.5 mg/ml | Bimeda | Cypermethrin | 6–8 weeks P+T | Kills existing lice | Yes | 8 days |
| Fly & lice spot-on | Zoetis | Deltamethrin | Treats established strike only | 4-6 week reduction in incidence | Up to 6 weeks | 35 days |
| Flydown | Downland | Deltamethrin | Treats established strike only | 4-6 week reduction in incidence | Up to 6 weeks | 35 days |
| Fly Off | United Farmers | Cypermethrin | 6–8 weeks P+T | Kills existing lice | Up to 10 weeks | 8 days |
| MoleEcto | Mole Valley | Cypermethrin | 6–8 weeks P+T | Kills existing lice | Up to 10 weeks | 8 days |
| Spotinor 10 mg/ml | Norbrook | Deltamethrin | Treats established strike only | 4-6 week reduction in incidence | Up to 6 weeks | 35 days |
| Vectocert 1.25% | Downland | Cypermethrin | 6–8 weeks P+T | Kills existing lice | Yes | 8 days |
| Zermasect sheep | Downland | Alphacypermethrin | 8-10 weeks P+T | Kills existing lice | 8-12 weeks | 49 days |

P = Prevention, T = Treatment

None of the products listed on this page are licensed for sheep producing milk for human consumption.

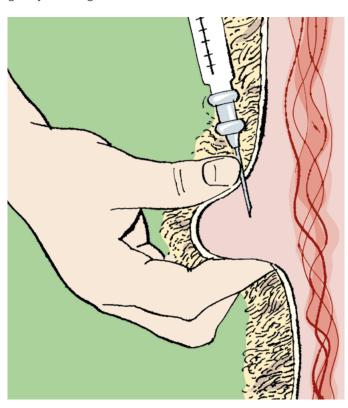
Check product labels for full and final details

Sheep treatment best practice



Subcutaneous injections

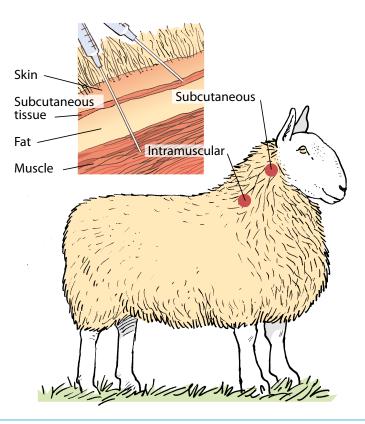
Subcutaneous injections need to be administered with care to ensure the product is placed under the skin and not into the fleece or muscle. The sheep needs to be well restrained and the skin 'tented' away from the underlying muscle. The preferred injection site is 10-15 cm (4-6 inches) below the ear on the side of the neck (see diagram below). Usually, a 1.6 cm (5/8 inch) needle is ideal. After administration, the site should be gently massaged.



Intramuscular injections

Intramuscular injections are made into muscle. Again, care is needed to ensure the product is deposited in muscle and not just under the skin. This requires sheep to be well restrained. The correct site is on the side of the neck 10-15 cm (4-6 inches) in front of the shoulder in the mid-neck area, well above the large jugular vein. Insert a 2.5–4 cm (1–1.5 inches) needle at a 60-degree angle to the neck, aiming inwards and upwards towards the head. Again, massage in after administration.

The neck site for intramuscular injections ensures no valuable cut of meat is damaged, and the constant movement of the neck ensures good dispersion of the product.



Pour-ons and spot-ons

Pour-ons and spot-ons need to be applied accurately, and each manufacturer may recommend subtle differences. Use appropriate and calibrated guns. Always clean with warm soapy water and then rinse after use. Store in a safe, dry place. When treating sheep with these products, make sure they are applied along the back line. If placed to one side, the product will not spread evenly around the body. No pour-on or spot-on is effective against sheep scab.





Dosing

Weigh – do not guess

Underestimating the weight of sheep is a common cause of underdosing. Select and weigh the biggest sheep in the group to determine the correct dose.

If there is a wide range of weights, consider splitting the group, then weigh the heaviest in each section.

Do not forget to check that the weigh crate is accurate and correctly calibrated before starting.

Calibrate and maintain the drench gun

Always check the gun is delivering the right amount before you drench. Remove the plunger from a 10 ml syringe, put a thumb over the end and squirt the dose into it, making sure there are no air bubbles left. Adjust the gun until the dose delivered is correct. Drenching guns should also be well maintained and replaced regularly. Clean with warm soapy water after use and check springs and tubes to make sure there are no kinks that will form air bubbles.

Storage

Wormers should be stored securely, away from direct sunlight at 4-25°C. Check the use-by date and, once open, use within the time shown on the packaging. Shake white (BZ) products well before use.

The product may be compromised by incorrect storage.

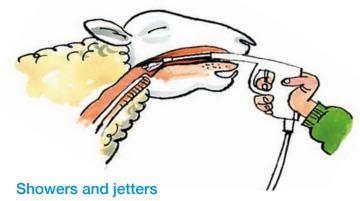
Withholding food

Research has shown that the efficacy of the white (BZ) and clear (AV) drenches can be improved by withholding food for 12-24 hours before treatment. It is not advised to deprive heavily pregnant ewes of food, so if you treat this class of stock with anthelmintics, you may wish to use yellow drenches (LV) because their efficacy is less dependent on rumen fill.

Drench correctly

The drenching technique is a vital part of ensuring that the wormer does its job effectively. Make sure the sheep are properly restrained and cannot leap around when they are being drenched, so they swallow the whole amount. Sheep can also suffer serious injury, or even death, if they are unrestrained and the gun penetrates the tissues at the back of the mouth. Place a hand under the head and tilt slightly to the side.

Slot the nozzle in the gap between the molar and incisor teeth and then over the back of the tongue. If the wormer is just put into the mouth, it will bypass the rumen as it escapes down the oesophageal groove and will be less effective. This is particularly important for white (BZ) drenches.



There are no medicinal products licensed for use in showers and/or jetters. Any blowfly, lice or scab treatments administered in this way are done so illegally.

Dipping

For plunge dipping, it is essential to know the capacity of the bath. Use only the two closed systems to charge the bath and to top up. Always top up as per instructions; if not, the dip wash will strip out and later sheep will not carry enough product for it to be effective. Do not dip tired, thirsty or heat-stressed sheep. Allow dipped sheep to drain in designated draining pens, and do not return

to pasture until excess dip has been shed. When dipping, use protective clothing, handle equipment carefully and stick to the manufacturer's instructions.

Sheep dipping must be carried out professionally and must comply with all relevant legislation to safeguard animal welfare, human health and the environment. It is also vital to minimise the risk of resistance developing in sheep scab mites to organophosphates (OP).

For further information on dipping legislation, see the Mobile Sheep Dipping Code of Practice 2023, which is available at: scops.org.uk/externalparasites/code-of-practice-for-mobile-dippers

Organophosphate (OP) dips can only be purchased and used under the supervision of someone with a Certificate of Competence (NPTC Level 2 Award in the Safe Use of Sheep Dip) - this can either be the farmer or a contract mobile dipper.

For plunge dipping to be effective against sheep scab, sheep have to be in the dip for at least one minute and the head needs to be immersed under water twice.

Make sure used sheep dip is discarded according to the regulations because it is potentially harmful if disposed of incorrectly.

Sheep must not be drenched with a levamisole (Group 2 - yellow) anthelmintic for at least 14 days prior to and 14 days after dipping.



Wormer purchase checklist

Do you need to treat?

- Which animals are at risk?
- Have animals been grazing high-risk pastures?
- Have weather/grazing conditions increased the risks (e.g. wet conditions and liver fluke infection)?
- · Has the risk been monitored, e.g. using faecal egg counts (FECs)?
- Can management be used to reduce the risk and the need to treat (e.g. move lambs/calves to lower-risk grazing)?

Consult your vet, SQP or RAMA (Registered Animal Medicines Advisor) for further advice when purchasing anthelmintics if you require clarification.

Product choice

What are the target parasites?

Treatments should be chosen according to the target parasites, the life-cycle stage, time of year and objective (curative or preventative). Use combination products only when the target parasites are present.

Avoid overuse of the same products

Consider alternative chemical groups, where possible, to reduce selection for resistance to one group.

Withdrawal periods

Consider withdrawal periods carefully when choosing a product.

Administer effectively

Make sure you have the right equipment, it is properly calibrated and you know the correct dose rate for the weight of animal to be treated. Avoid underdosing or overdosing. Always follow the manufacturer's recommendations, store products correctly and do not use out-of-date product.

What pack size is required?

If a pack size is slightly less than required, leave one or two fit animals undosed: never underdose the whole group.

Do not mix wormers with any other product prior to administration.





Relevant resources

Publications

Using medicines responsibly Worm control in sheep Controlling, monitoring and treating worms in cattle Liver fluke control in grazing livestock

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