

VAPORMATE®.

For fast, safe and eco-friendly fumigation.

For centuries, people have struggled with the need to eliminate pests in harvested food without compromising human health or the environment. Typically, agricultural distributors have relied on radiation, chemicals or gases such as methyl bromide to comply with statutory fumigation requirements. However, these processes present various environmental and health challenges. Methyl bromide, for instance, has been outlawed in many countries due to its high ozone depleting potential.

At Linde, we believe in innovative pest control technologies, equipment and services that balance the need for effective fumigation with environmental awareness. Not only do our pest control solutions present a more sustainable way to secure tomorrow's food chains, they also create a safer, healthier work environment for fumigators.





Fresh take on fumigation

VAPORMATE® is our eco-friendly, safe answer to today's fumigation challenges. The active ingredient is ethyl formate – a naturally occurring, non-residual substance with zero ozone depleting potential. VAPORMATE has been developed for a broad range of applications from post-harvest fumigation through modified atmosphere packaging to equipment deinfestation. It is suited to a wide variety of fruits, vegetables and grains and the list of regulatory approvals is expanding rapidly. You can rely on VAPORMATE for rapid results (1 to 24 hours) at all life stages of the pest – egg, larva and adult. Other highlights include faster logistics chains as VAPORMATE eliminates the need for withholding periods, although aeration may be necessary in fumigation chambers.

Typical examples of products, dosing rates and treatment times

Product/ application	Pest/insect	Application rate
Cereal grains and seeds	Lesser grain borers, different beetles, psocids, storage moths, rice weevils	660 gr/m ³ for 3 hrs 420 gr/m ³ for 24 hrs
Grain stores and equipment	Adult stage rice weevils, several beetles, psocids	180 gr/m ³ for 6 hrs
Leafy vegetables	Aphids	120 gr/m ³ for 6 hrs
Fruit vegetables	Western flower thrips	70 gr/m ³ for 6 hrs
Cut flowers	Western flower thrips	30 gr/m ³ for 6 hrs
Dates	Beetles	420 gr/m ³ for 12 hrs
Kiwis	Oleander scales, mealy bugs	140 gr/m ³ for 6 hrs
Bananas	Mites, mealy bugs	420 gr/m ³ for 6 hrs
Pineapples	Mites, mealy bugs, scales	420 gr/m ³ for 6 hrs

Please contact us for details on dosage and registration in your country.

Solution of choice for the eco-conscious

VAPORMATE is the eco-friendly, safe, non-residual way to protect your post-harvest produce, packaged and stored foods and processing equipment.

Benefits at a glance

- Environmentally friendly, fast-acting alternative to methyl bromide
- Naturally occurring active ingredient with zero global warming potential
- Favourable toxicological profile compared to traditional fumigants
- Effective for a wide range of insects
- Approved for a broad – and growing – selection of fruit, vegetables and grains
- Faster shipping – no withholding period
- Efficiency gains thanks to dedicated, innovative dispensing solution

Complementary services

We combine our innovative VAPORMATE solution with professional expertise, services and reliable safety support to ensure you enjoy the best possible results. Inspired by a strong and active sense of product stewardship, our broad service offering extends from initial evaluations through dosing equipment customisation and field trials to registration support. For your added safety, we also offer personal protective equipment, safety training, installation support and waste gas management. Talk to us today to see how we can help you.

For more information about our fumigation solutions and details of current or pending regulatory tests and approvals, visit www.linde-gas.com/fumigants or contact:

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