

ECO₂ FUME

The Benefits of a Premixed Fumigant

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Presentation Summary

ECO₂FUME is a gaseous mixture of phosphine (2% by weight) in carbon dioxide and has been used in Australia for several years. **ECO₂FUME** has the potential of substituting some methyl bromide applications for structural and commodity fumigations. This new product has many benefits, including:

Improved Worker Safety

- Non-flammable
- A residual-free environment
- Premixed in a ready to use, controlled cylinder, which eliminates on-site mixing and direct contact with PH₃.

Environmental

- No disposal of residual product
- Alternative to methyl bromide for select applications

Improved Product

- Lower concentration PH₃
- No aluminum hydroxide on product
- Potential synergistic effect with carbon dioxide
- Does not have to be administered in an air-tight facility
- May replace ineffective present day railcar fumigations

BOC has begun plans for plant production and sourcing of PH₃. Registration processes for fumigant status are already in motion in the U.S. and Canada, Europe, and other parts of the world. This product will be available on the global market in 1997, registration as **ECO₂FUME** for U.S. and Canada, and Phosfume in Australia and Europe.

The EPA is currently reviewing an experimental use permit application and data collection in field work should commence this fall or early winter in the U.S. and in the spring in Canada with an expected launch of in the first half of 1997.

As a potential replacement for some uses of methyl bromide, **ECO₂ FUME** will be utilized in the New Combination Fumigation on flour mills and food processing plants. This is a source of millions of pounds of methyl bromide each year. The use of a controlled fumigation technique will provide a faster and more calculated fumigation for these time starved industries. One days shutdown time could represent over a million dollars loss in revenue.

The equipment provided for such a technique will allow a gradual, calibrated, and exact releases of PH₃ in a grain bin or fast and equally distributed release in a large food processing facility.

Some of the targeted industries include: tobacco, railcar, grain, popcorn, nut, flour mills, food processing, food warehousing, peanut, ships, barges, and any place where phosphine is used today.

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