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CYLINDERIZED PHOSPHINE FUMIGANTS: SUSTAINABLE ALTERNATIVES FOR THE 21ST CENTURY

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ABSTRACT

ECO₂FUME® and VAPORPH₃OS® fumigant gas products have been proven as commercially and technically viable alternatives to methyl bromide and metallic phosphides for post-harvest fumigation applications.

Traditional fumigants such as methyl bromide and metallic phosphides have been effectively used for decades. However they have safety and environmental shortcomings in their use, application and disposal. Cytec's cylinderized phosphine fumigants address these issues directly with easy-to-use products that reduce the potential for worker exposure making them inherently safer to use. The use of cylinderized phosphine also reduces environmental impact through precise dosing of the desired level of phosphine and the elimination of waste by-product disposal. Phosphine does not deplete the ozone layer.

This paper will provide an update on a number of topics related to cylinderized phosphine fumigants, including global regulatory status as well as case studies of methyl bromide replacement and new applications for cylinderized phosphine in post harvest pest control. New efficacy data will be presented indicating effective pest control with reduced exposure time at elevated temperatures.