

**Registration Status of Alternatives to Methyl Bromide for the United States of America  
Response to Decision Ex.I/4, Paragraph 1**

Updated on February 4, 2011

<b>Use Category</b>	<b>Alternatives Available</b>	<b>Status of Registration</b>	<b>Alternatives Under Development</b>	<b>Possible Date of Registration</b>
Commodities	Propylene Oxide	Registered	Ethyl Formate	Not registered
	Phosphine	Registered	Ethylene Oxide	Not registered
	Sulfuryl Fluoride	Registered	Methyl Formate	Not registered
Cucurbits	1,3-Dichloropropene	Registered	Furfural	Not registered
	Chloropicrin	Registered	Iodomethane	Not registered
	Dimethyl Disulfide	Registered	Propargyl Bromide	Not registered
	Glyphosate	Registered	Sodium Azide	Not registered
	Halosulfuron	Registered		
	Metam Sodium	Registered		
	Paraquat	Registered		
	1,3-Dichloropropene + Chloropicrin	Registered		
Eggplant	1,3-Dichloropropene	Registered	Furfural	Not registered
	Chloropicrin	Registered	Iodomethane	Not registered
	Dimethyl Disulfide	Registered	Propargyl Bromide	Not registered
	Halosulfuron	Registered	Sodium Azide	Not registered
	Metam Sodium	Registered		
	Napropamide	Registered		
	Trifluralin	Registered		
	1,3-Dichloropropene + Napropamide + Trifluralin	Registered		
	1,3-Dichloropropene + Chloropicrin	Registered		
Metam Sodium + Chloropicrin	Registered			
Food Facilities	Phosphine	Registered	Ethyl Formate	Not registered
	Sulfuryl Fluoride	Registered	Ethylene Oxide	Not registered
			Methyl Formate	Not registered

Use Category	Alternatives Available	Status of Registration	Alternatives Under Development	Possible Date of Registration
Forest Seedlings	1,3-Dichloropropene	Registered	Propargyl Bromide	Not registered
	Chloropicrin	Registered	Sodium Azide	Not registered
	Dazomet	Registered		
	Dimethyl Disulfide	Registered		
	Iodomethane**	Registered		
	Metam Sodium	Registered		
	Metam Sodium + Chloropicrin	Registered		
	1,3-Dichloropropene + Chloropicrin	Registered		
Ham	Sulfuryl Fluoride*	Registered		
Nurseries: Raspberries	1,3-Dichloropropene	Registered	Dimethyl Disulfide	Not registered
	Chloropicrin	Registered	Sodium Azide	Not registered
	Iodomethane**	Registered	Propargyl Bromide	Not registered
	Dazomet	Registered		
	Metam Sodium	Registered		
	1,3-Dichloropropene + Chloropicrin	Registered		
	1,3-Dichloropropene + Metam Sodium	Registered		
Nurseries: Fruit and Nut Tree	1,3-Dichloropropene	Registered	Dimethyl Disulfide	Not registered
	Chloropicrin	Registered	Sodium Azide	Not registered
	Dazomet	Registered	Propargyl Bromide	Not registered
	Iodomethane**	Registered		
	Metam Sodium	Registered		
	1,3-Dichloropropene + Chloropicrin	Registered		
	1,3-Dichloropropene + Pic + Metam Sodium	Registered		
	1,3-Dichloropropene + Metam Sodium	Registered		
	1,3-Dichloropropene + Dazomet	Registered		

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Nurseries: Roses	1,3-Dichloropropene	Registered	Dimethyl Disulfide	Not registered
	Chloropicrin	Registered	Sodium Azide	Not registered
	Dazomet	Registered	Propargyl Bromide	Not registered
	Iodomethane**	Registered		
	Metam Sodium	Registered		
	1,3-Dichloropropene + Chloropicrin	Registered		
	1,3-Dichloropropene + Chloropicrin + Metam Sodium	Registered		
	1,3-Dichloropropene + Metam Sodium	Registered		
Orchard Replant	1,3-Dichloropropene	Registered	Dimethyl Disulfide	Not registered
	Chloropicrin	Registered	Sodium Azide	Not registered
	Dazomet	Registered	Propargyl Bromide	Not registered
	Iodomethane**	Registered		
	Metam Sodium	Registered		
	Sodium Tetrathiocarbonate	Registered		
	1,3-Dichloropropene + Chloropicrin	Registered		
	1,3-Dichloropropene + Metam Sodium	Registered		
	1,3-Dichloropropene + Chloropicrin + Metam Sodium	Registered		
Ornamentals	1,3-Dichloropropene	Registered	Furfural	Not registered
	Dazomet	Registered	Sodium Azide	Not registered
	Dimethyl Disulfide	Registered	Potassium Tri-iodide	Not registered
	Chloropicrin	Registered	Propargyl Bromide	Not registered
	Iodomethane**	Registered		
	Metam Sodium	Registered		
	1,3-Dichloropropene + Chloropicrin	Registered		
	Dazomet + Chloropicrin	Registered		
	Metam Sodium + Chloropicrin	Registered		

Use Category	Alternatives Available	Status of Registration	Alternatives Under Development	Possible Date of Registration
Peppers	Metam Sodium	Registered	Furfural	Not registered
	1,3-Dichloropropene	Registered	Sodium Azide	Not registered
	Chloropicrin	Registered	Propargyl Bromide	Not registered
	Dimethyl Disulfide	Registered		
	Iodomethane**	Registered		
	Halosulfuron	Registered		
	Glyphosate	Registered		
	Paraquat	Registered		
	Metam Sodium + Chloropicrin	Registered		
	1,3-Dichloropropene + Chloropicrin	Registered		
	1,3-Dichloropropene + Metam Sodium	Registered		
Post-Harvest Uses	Phosphine	Registered	Ethyl Formate	Not registered
	Sulfuryl Fluoride*	Registered	Ethylene Oxide	Not registered
			Methyl Formate	Not registered
Strawberry	1,3-Dichloropropene	Registered	Furfural	Not registered
	Chloropicrin	Registered	Propargyl Bromide	Not registered
	Dazomet***	Registered		
	Dimethyl Disulfide	Registered		
	Iodomethane**	Registered		
	Metam Sodium	Registered		
	Terbacil	Registered		
	1,3-Dichloropropene + Chloropicrin	Registered		
	1,3-Dichloropropene + Chloropicrin + Metam Sodium	Registered		
	Metam Sodium + Chloropicrin	Registered		
Strawberry Nursery	Chloropicrin	Registered	Dimethyl Disulfide	Not registered
	1,3-Dichloropropene	Registered	Furfural	Not registered
	Iodomethane**	Registered	Propargyl Bromide	Not registered
	Metam Sodium	Registered	Sodium Azide	Not registered

Use Category	Alternatives Available	Status of Registration	Alternatives Under Development	Possible Date of Registration
Tomato	1,3-Dichloropropene	Registered	Furfural	Not registered
	Chloropicrin	Registered	Pebulate	No longer registered
	Dazomet***	Registered	Propargyl Bromide	Not registered
	Dimethyl Disulfide	Registered	Sodium Azide	Not registered
	Fosthiazate	Registered		
	Glyphosate	Registered		
	Iodomethane**	Registered		
	Metam Sodium	Registered		
	Paraquat	Registered		
	Halosulfuron-methyl	Registered		
	s-Metolachlor	Registered		
	Trifloxysulfuron-methyl	Registered		
	Rimsulfuron	Registered		
	Metam Sodium + Chloropicrin	Registered		
	1,3-Dichloropropene + Metam Sodium	Registered		
1,3-Dichloropropene + Chloropicrin	Registered			
Turf (sod)	1,3-Dichloropropene	Registered	Dimethyl Disulfide	Not registered
	Chloropicrin	Registered	Sodium Azide	Not registered
	Furfural	Registered		
	Iodomethane**	Registered		
	Metam Sodium	Registered		
	Dazomet	Registered		
	Dazomet + Chloropicrin	Registered		
	Metam Sodium + Chloropicrin	Registered		

\*Research on-going to evaluate efficacy in controlling mites  
\*\* Not registered in New York and Washington.  
\*\*\*The registration for Dazomet is limited to California only.