

The pesticides listed below have been pre-authorized for use at overseas posts for the most common pests. Posts are limited to using these professional-use pesticides, local equivalents, or pesticides reviewed and authorized by OBO/OPS/SHEM. Garden pesticides do not require authorization; instead, use the least toxic effective pesticide and follow all procedures and protective measures on the pesticide label. In accordance with integrated pest management, be sure to thoroughly assess any pest problem and ensure that pesticide use is appropriate. Non-chemical measures may be equally or more effective. The conditions that invited the pest must be identified and controlled in order to achieve long-term control. Department-authorized pesticides are periodically changed. Consult the SHEM website (<http://obo.m.state.sbu/ops/shem/Pages/IPMProgram.aspx>).

TARGET PEST(S)	INDICATIONS	PESTICIDE	BRIEF USE INSTRUCTIONS
Ants – Use bait stations or bait gels indoors. Outdoors apply liquid applied directly on nests or around building exterior	Bait gel for indoor use If the bait preference of the ants, protein & sweet bait can be purchased separately	Drax Gel Dual Syringe ¹ (Waterbury Companies) Protein (PF) Sweet	Apply directly into cracks and crevices in dollops in aggregation areas.
	Liquid applied directly on nests or around building exterior	Surrender (a.k.a. Demand) Pestab Lambda-cyhalothrin	Follow mixing and dilution rate instructions on label. Typical dilution is 1 tablet per gallon of water.
Cockroaches	Bait gel (indoor use) in cracks and crevices and dollops in areas of cockroach activity	Siege PBS (pressurized bait system w/ hydramethylon (American Cyanamid)	Apply directly into cracks and crevices in aggregation areas.
		Maxforce Roach Killer Bait Gel ¹ – w/ fipronil Syringe Injector needed (Bayer)	
Cockroaches and some stored product pests	Insect growth regulator that prevents maturation. For faster results, often used in conjunction with other products. Stimulates cockroaches to feed on baits.	Gentrol Point Source – active ingredient is hydroprene (Zoecon/Wellmark)	Press to activate. Place in areas of pest activity. Do not place in areas accessible to children. Use at least 1 per 75 square feet of area. Replace every 3 months.
Fleas	Aerosol, “bomb”, liquid sprays containing a pyrethrin/ pyrethroid and an insect growth regulator.	Various – label should indicate that product kills emerging fleas and is effective for several months.	Follow label instructions. Note that some “bomb” type products are potentially flammable – ignition sources must be extinguished prior to treatment.

¹ Similar gel baits may also be acceptable (e.g., Goliath, Pre-Empt). Submit a label to OBO/OM/SHEM for authorization request.

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Indoor Crawling Insects (e.g., roaches, ants, spiders, silverfish) NOT fleas!	Liquid spray for or spot and crack and crevice application only (indoors) where pests congregate or have been seen. Outdoor surfaces such as porches, patios, garages. Consult labels for target pests.	Tempo SC Ultra - 24.3% cyfluthrin, liquid concentrate (Bayer Corp)	Mix in water for 0.05% finished concentration. For heavy infestations, mix 0.1% finished concentration.
	Ready-to-use, weather/ moisture resistant bait. Can be applied to exterior perimeter areas or indoors.	Surrender (a.k.a. Demand) Pestab Lambda-cyhalothrin	Follow mixing and dilution rate instructions on label. Typical dilution is 1 tablet per gallon of water.
		Niban Fine Granular – 5% orthoboric acid (Nisus Corp)	Apply only in areas inaccessible to children & pets. Apply liberally to cracks & crevices. Avoid contamination of food.
Mosquitoes, outdoors	Outdoors as residual spray for on surfaces where adult mosquitoes congregate and for perimeter treatments.	Demand Pestab - Lambda-cyhalothrin (Zeneca)	Follow mixing and dilution rate instructions on label.
	Larvicide added to standing water in ponds, bird baths, tires, etc. for sustained release of larvicide for long-term control of mosquito larvae	Bactimos Briquets – 10% <i>Bacillus thuringiensis berliner var israelensis</i> (bti)	Briquets release bti for a period of 30 days or longer. More details on label for outdoor use.
		Mosquito Bits (bti) Mosquito Dunks (bti) (Summit Chemical Co.)	Add to standing water.
Weeds, grasses and other plants	Non-selective herbicide. Kills all vegetation such as weeds, grasses, etc. Spray applied.	Roundup Pro - 41% glyphosate, water soluble liquid (Monsanto)	For both Roundup products (liquid and dry pack) mix with water in accordance with label instructions for selected vegetation to be controlled.
		Roundup Dry Pack - 0.96% glyphosate (Monsanto)	

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Weeds	Selective herbicide. Kills certain plants such as broadleaf weeds and brush while leaving desirable grasses.	2,4 –D dichloro-phenoxyacetic acid emulsifiable liquid (Riverdale Chemical)	Mix 2,4-D with water in accordance with label instructions for selected weeds and other vegetation to be killed.
Rodents: rats and mice, domestic	Bait must be secured in tamper resistant bait stations (ordered separately). Keep away from humans, domestic animals and pets.	Talon-G - 0.005% brodifacoum. Single dose anticoagulant bait (pellets). (ICI/Zeneca)	Place pellets in tray in bait station. Secure Blox in bait station. Ensure bait station can not be moved. Rats: use 4 to 16 ounces Talon-G or Maki bait (at intervals of 15 to 30 feet) per placement. Maintain an uninterrupted supply of fresh bait for 10 days or until signs of rat activity cease. Mice: apply ¼ to ½ ounce of bait at intervals of 8 to 12 feet per placement. Up to 2 ounces may be required for high mouse activity. Maintain uninterrupted supply of fresh bait for 15 days or until signs of mouse activity cease.
	Bait indoors should not be used indoors to control rats.	Maki - 0.005% bromadiolone. Single dose anticoagulant bait (pellets) (Lipha Tech Inc.)	
		Conrac Blox - 0.005% bromadiolone. Single dose anticoagulant bait in 1 oz blocks	
	Bait station to contain baits	Bait Station, plastic tamper-proof. Make sure stations are appropriate for type of bait	
Wood-Destroying Organisms –Termites (subterranean and drywood) powderpost beetles, and carpenter ants, etc.	Borate products can be used for existing infestations and as a pre-treatment of wood surfaces to prevent infestations.	BORA-CARE -disodium octaborate tetrahydrate (Nisus Corp)	Mix with water and apply by brush or spray injection to bare wood or to wood surfaces without a water-repellent barrier.
		Tim-BOR - disodium octaborate tetrahydrate (Nisus Corp)	

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Termites, subterranean	Outdoors only around the perimeter of the property by injection and/or trenching which provides a termite resistant barrier for a number of years.	Termidor 80 WG 80% fipronil Termidor SC	Mix 1 packet per 25 gallons of water for a 0.06% finished concentration for typical situations. Apply 4 gallons per 10 linear feet of building perimeter. Follow label.
		Termidor SC 9.1% fipronil	Apply as above. Mix 0.8 oz per gal water or 78 oz per 100 gal. Tip and measure container can be used to mix as little as 1 gallon for spot treatments. Liquid is more difficult to ship
		Premise 75 75% Imidacloprid	Mix 1 packet per 25 gallons of water for a 0.05% finished concentration for typical situations. Apply 4 gallons per 10 linear feet of building perimeter. Follow label.
		Premise SC 2 21.4% Imidacloprid	Mix 8-16 oz per gallon of water apply as above. Liquids are more difficult to ship, but useful for small treatments.
		Bait stations for colony decimation and monitoring	Sentricon w/ Recruit - 0.5% Hexaflumuron
Termites, drywood and other wood infesting insects such as beetles and carpenter ants	Indoors - for treatment of small areas of wood-infesting insects, e.g. drywood termites. Apply by brushing or spraying the diluted spray evenly on wood surfaces.	Termidor 80 WG 80% fipronil	Mix 1 packet per 25 gallons of water for a 0.06% finished concentration. Apply to Infested areas of wooden members/voids or by drilling & injecting.
		Termidor SC 9.1% fipronil	Apply as above. Mix 0.8 oz per gal water or 78 oz per 100 gal. Tip and measure container can be used to mix as little as 1 gallon for spot treatments. Liquid is more difficult to ship
		Premise 75 75% Imidacloprid	Mix 1 packet per 25 gallons of water for a 0.05% finished concentration. Apply as foam to voids & galleries & between sill plate and foundation &/or by drilling then injecting
		Premise SC 2 21.4% Imidacloprid	Mix 8-16 oz per gallon of water apply as above. Liquids are more difficult to ship, but useful for small treatments.
		Tempo 2 EC/SC Ultra - 24.3% cyfluthrin, liquid concentrate	Use a 0.1% dilution of Tempo 2. Mix 16 ml of Tempo 2 in 1 gal. of water. Detailed instructions are covered on the label.