

**San Francisco Reduced-Risk Pesticide List
for City-owned properties (DRAFT 8/8/22)**

Product Name	Type	US EPA #/ SF code*	Ingredients	Pesticide Hazard Tier**	Use Limitation Type***	Use Limitations Other uses require an exemption	Changes for 2022
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 20%;"> <p> = product added</p> <p> = language changed</p> <p> = product removed</p> </div> <div style="width: 60%; text-align: center;"> <p>GENERAL USE PRODUCTS</p> </div> </div>							
Actinovate products	Fungicide	73314-1, 524-641	<i>Streptomyces lydicus</i> WYEC 108	Least hazardous (Tier III)	Least Limited		
Advance 360A Dual Choice Ant Bait Stations	Insecticide	499-496	Abamectin B1, 0.011%	Most hazardous (Tier I)	Least Limited		
Advion Ant Gel	Insecticide	100-1498	Indoxacarb 0.05%	Least hazardous (Tier III)	Least Limited		
Advion Cockroach Bait Arena	Insecticide	100-1486	Indoxacarb 0.5%	Least hazardous (Tier III)	Least Limited		
Advion Evolution Cockroach Gel Bait	Insecticide	100-1484	Indoxacarb 0.6%	Least hazardous (Tier III)	Least Limited		
Agri-Fos Systemic Fungicide	Fungicide	71962-1	Potassium phosphite 45.8%	Least hazardous (Tier III)	Least Limited	For use on high-value <i>Coast Live Oaks (Quercus agrifolia)</i> susceptible to <i>Phytophthora</i> or in experiments with <i>Phytophthora</i> control, or on high-value Monterey Pines (<i>Pinus radiata</i>) susceptible to <i>Fusarium subglutinans</i> . In accordance with label restrictions for use in California, injection and basal bark spray is the only application method permitted. USE UP EXISTING STOCKS.	CHANGED- Added "USE UP EXISTING STOCKS."
Alligare Rotary 2 SL	Herbicide	81927-6	Imazapyr, isopropylamine salt 28%	More hazardous (Tier II)	More Limited	Subject to "Restrictions on herbicides." Alternative to Tier I herbicides. Use caution with adjoining desirable vegetation.	

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Ant and crawling insect baits - borate based - self contained, gel, liquid	Insecticide	Various	Boric acid, sodium tetraborate decahydrate, or other borate salts	Most hazardous (Tier I)	Least Limited		
Aquatrols Capsil	Adjuvant	9037-50003	Polyether Modified Polysiloxane, 20%	Least hazardous (Tier III)	Least Limited	Alternative surfactant to CMR product	CHANGED- Deleted "Alternative surfactant to CMR product"
Avian Control bird repellent, or equivalent products with same active ingredient	Repellent	88889-1	Methyl anthranilate, 20%	Least hazardous (Tier III)	Least Limited		
Avenger Weed Killer	Herbicide	92967-4 (ACTIVE), 82052-4 (INACTIVE)	d-Limonene 60%	Least hazardous (Tier III)	More Limited	Subject to "Restrictions on herbicides." Burndown herbicide. Not for use near water.	
Axxe	Herbicide	70299-23	Nonanoic acid, 61%	More hazardous (Tier II)	More Limited	Subject to "Restrictions on herbicides." Burndown herbicide.	
Bacillus thuringiensis insecticides (excluding mosquito control)	Insecticide	Various	<i>Bacillus thuringiensis</i> (various subsp.)	Least hazardous (Tier III)	Least Limited		
BestYet Cedarcide	Insecticide	exemptprod-009	Cedarwood oil, amorphous silica	Least hazardous (Tier III)	Least Limited		
BioLink Buffer & Penetrant	Adjuvant	exemptprod-010	Citric acid 20%, garlic extract 7%	More hazardous (Tier II)	Least Limited		

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Cambistat & Cambistat Row	Growth regulator	74779-3	Paclobutrazol, 22.3%	More hazardous (Tier II)	More Limited	For use only on Ficus trees in difficult to access sites due to Muni overhead Lines, track clearances, or similar restrictions that require transit modifications or disallow pruning during normal business hours.	REMOVED- Not being used
Cimexa Insecticide Dust	Insecticide	73079-12	Amorphous silica gel 100%	Least hazardous (Tier III)	Least Limited	Only for use on ants, bedbugs, and lice in walls when nonchemical techniques prove ineffective.	
Clearcast Herbicide	Herbicide	241-437	Imazamox, ammonium salt	More hazardous (Tier II)	More Limited	Subject to "Restrictions on herbicides."	
Competitor	Adjuvant	2935- 50173	Ethyl oleate	Least hazardous (Tier III)	Least Limited		
Conserve SC Turf and Ornamental	Insecticide	62719-291	Spinosad 11.6%	More hazardous (Tier II)	Least Limited	For use as a last resort in greenhouses. If feasible, alternate with other products to avoid the development of resistance. Use on high value ornamentals only.	
Coyote urine based products	Mammal repellant	exemptprod- 014	Coyote urine	Least hazardous (Tier III)	Least Limited		
Debug Turbo	Insecticide Nematicide	70310-5	Fats & glyceridic oils margosa 65.8%, azadirachtin 0.7%	More hazardous (Tier II)	Least Limited		CHANGED- Added insecticide to product type
Detour	Mammal repellant	exemptprod- 015	White pepper 3%, white mineral oil 87%, silica 10%	Least hazardous (Tier III)	Least Limited		
Essentria IC3	Insecticide	exemptprod- 013	Rosemary oil 10%, geraniol 5%, peppermint oil 2%, wintergreen oil, white mineral oil, vanillin, polyglyceryl oleate	Least hazardous (Tier III)	Least Limited		

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Garlon 4 Ultra	Herbicide	62719-527	Triclopyr, butoxyethyl ester 60.45%	Most hazardous (Tier I)	Most Limited	Subject to "Restrictions on herbicides" Use only for targeted treatments of high profile or highly invasive exotics via dabbing or injection. May use for targeted spraying only when dabbing or injection are not feasible. USE UP EXISTING STOCKS to phase out use over next year. (Vastlan is safer alternative)	CHANGED- Added "...to phase out use over next year."
Havahart Critter Ridder	Mammal repellent	50932-10	Oil of black pepper 0.48%	Least hazardous (Tier III)	Least Limited		
Hydroprene-only products	Insect growth regulator Various	Various	Hydroprene	Least hazardous (Tier III)	Least Limited		CHANGED- Replaced "various" product type with "insect growth regulator"
Lifeline Herbicide	Herbicide	70506-310	Glufosinate, ammonium, 24.5%	More hazardous (Tier II)	More Limited	Subject to "Restrictions on herbicides."	
Maxforce Complete Granular Insect Bait	Insecticide	432-1255	Hydramethylnon, 1%	Most hazardous (Tier I)	More Limited	Only for use in bait stations.	
Maxforce Impact Roach Gel Bait	Insecticide	432-1531	Clothianidin, 1%	More hazardous (Tier II)	Least Limited	Rotate active ingredients to manage resistance	
Met 52 Granular Bioinsecticide	Insecticide	70127- 10, 70127-8	Metarhizium anisopliae strain F52, 11%	Least hazardous (Tier III)	Least Limited	Preferred alternative to spinosad products	
Milestone	Herbicide	62719-519	Aminopyralid, triisopropanolamine salt (5928) 40.6%	More hazardous (Tier II)	More Limited	Subject to "Restrictions on herbicides." For invasive species in natural areas or parklands where other alternatives are ineffective, especially for invasive legumes and composites such as yellow star thistle and purple star thistle.	

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Milestone VM Plus, Capstone	Herbicide	62719-572	Aminopyralid, triisopropanolamine salt, 2%; Triclopyr, triethylamine salt, 16%	More hazardous (Tier II)	More Limited	Subject to "Restrictions on herbicides." Use only for cut stump or injection	
Nematodes - beneficial	Insecticide	Various	Various nematode spp.	Least hazardous (Tier III)	Least Limited		
Nibor-D	Insecticide	64405-8	Disodium octaborate tetrahydrate, 98%	Most hazardous (Tier I)	Least Limited		
Nufarm Polaris Herbicide	Herbicide	228-534	Imazapyr, isopropylamine salt, 28%	More hazardous (Tier II)	More Limited	Subject to "Restrictions on herbicides." Alternative to Tier I herbicides. Use caution with adjoining desirable vegetation.	
OhYeah!	Insecticide	exemptprod- 002	Sodium lauryl sulfate	Least hazardous (Tier III)	Least Limited		
Orange Guard	Insecticide	61887-1	D-limonene (orange oil) 5.8%	More hazardous (Tier II)	More Limited	Soap spray is preferred for removing ant trails. Minimize use in enclosed areas due to scent. Potential aquatic hazard - do not apply directly to water.	
Organocide	Insecticide	exemptprod- 010	Sesame oil 5%	Least hazardous (Tier III)	Least Limited		
Oust XP Herbicide (DuPont)	Herbicide	432-1552, 352-601	Sulfometuron-methyl 75%	More hazardous (Tier II)	Most Limited	Subject to "Restrictions on herbicides." For use only on airport operational areas subject to FAA requirements, or PG&E leased yards.	
Pentra-bark Bark Penetrating Surfactant	Adjuvant	83416- 50001	Polyalkyleneoxide modified heptamethyltrisiloxane	Least hazardous (Tier III)	Least Limited		
Prescription Treatment Brand Wasp-Freeze Wasp and Hornet Killer	Insecticide	499-550, 499-362	Phenothrin 0.12%, d-trans allethrin 0.129%, CO2	Most hazardous (Tier I)	Most Limited	Use only when a concern for public safety, and in situations where use of soap-based products, Suspend, or physical removal is inadequate or unsafe.	

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Profoam Platinum Foaming Agent	Adjuvant	1051148-50001	Sodium lauryl sulfate, sodium lauroampho acetate, sodium decyl sulfate, 60%	More hazardous (Tier II)	Least Limited		
Reliant	Fungicide	83416-1	Mono- and di-potassium salts of phosphorous acid, 45.8%	More hazardous (Tier II)	Least Limited	For use on high-value trees for control of <i>Phytophthora</i> and fungal pathogens. Injection and basal bark treatments are the only application methods permitted.	ADDED- Reliant will eventually replace Agri-Fos, which is no longer sold
Rhapsody	Fungicide	264-1155	QST 713 strain of dried <i>Bacillus subtilis</i> , 1.34%	Least hazardous (Tier III)	Least Limited		CHANGED- Moved from Golf Products to General Use Products
Roundup Custom Herbicide (Aquamaster)	Herbicide	524-343	Glyphosate, isopropylamine salt 53.8%	Most hazardous (Tier I)	Most Limited	Subject to "Restrictions on herbicides." Use only for situations where root translocation or residual effect on sensitive areas makes other alternatives infeasible.	
Safer Soap O-Insecticidal Soap Concentrate	Insecticide	42697-60	Potassium laurate, 49.52%	More hazardous (Tier II)	Least Limited		
Sluggo Slug and Snail Bait	Molluscicide	67702-3	Phosphoric acid, iron(3+) salt (1:1) 1%	Least hazardous (Tier III)	Least Limited		
Spraytech Oil	Insecticide	65328-50001	Soybean oil	More hazardous (Tier II)	Least Limited		
Suppress Herbicide EC	Herbicide	51517-9	Caprylic acid, 47%; capric acid, 32%	More hazardous (Tier II)	Least Limited	Subject to "Restrictions on herbicides." Alternative to Tier I herbicides. Burndown product.	

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Suspend Polyzone	Insecticide	432-1514	Deltamethrin, 4.75%	Most hazardous (Tier I)	Most Limited	Restricted to treatments of stinging insect nests in highly public areas, where slower-working alternatives could result in hazards to the public. May also be used for carpenter bees at Camp Mather when preventive measures have failed, or for wall treatments for mosquitoes in confined areas where source cannot be located	
Vastlan	Herbicide	62719-687	Triclopyr choline, 45.2%; glycerol, 3%	More hazardous (Tier II)	Most Limited	Subject to "Restrictions on herbicides" Use only for targeted treatments of high profile or highly invasive exotics via dabbing or injection. May use for targeted spraying only when dabbing or injection are not feasible.	
Zoecon PreCor IGR Concentrate	Insecticide	2724-352	S-Methoprene, 1.2%; mineral oil, refined, 98.8%	Least hazardous (Tier III)	Least Limited		
GOLF PRODUCTS							
Civitas Turf Defense Pre-Mixed	Fungicide	69526-17	Mineral oil, refined, 89%	Least hazardous (Tier III)	Least Limited		
Fosphite Fungicide	Fungicide	68573-2	Potassium phosphate	Least hazardous (Tier III)	More Limited	Only for use on golf courses.	
Heritage Fungicide	Fungicide	100-1093	Azoxystrobin 50%	Most hazardous (Tier I)	Most Limited	For use on Harding Park/Fleming golf courses only in preparation for tournament play	
Indemnify	Nematicide	432-1543	Fluopyram, 34.5%	More hazardous (Tier II)	Least Limited	For use on golf course putting surfaces only	
Lontrel Turf and Ornamental Herbicide	Herbicide	62719-305	Clopyralid, 40.9%	More hazardous (Tier II)	More Limited	Subject to "Restrictions on herbicides." For use on Harding Park/Fleming golf courses only in preparation for tournament play. May be used 1x/year in other golf courses on greens only.	

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Primo Maxx	Growth regulator	100-937	Trinexapac-ethyl 11.3%, tetrahydrofurfuryl alcohol (THFA)	More hazardous (Tier II)	More Limited	Only use on Harding/Fleming golf courses in preparation for major golf tournaments.	
Quinclorac 1.5L	Herbicide	53883-336	Quinclorac, dimethylamine salt, 18.92%	More hazardous (Tier II)	More Limited	Subject to "Restrictions on herbicides." For use on Harding Park/Fleming golf courses only in preparation for tournament play.	
Sapphire	Herbicide	62719-547	Penoxsulam	More hazardous (Tier II)	More Limited	Subject to "Restrictions on herbicides." Only use on City-owned golf courses in preparation for major golf tournaments, for no-mow grass as glyphosate alternative, or for <i>Arctotheca</i> control on other turf.	
Tourney	Fungicide	59639-144	Metconazole, 50%; Silica-crystalline quartz	Most hazardous (Tier I)	More Limited	For management of pink snow mold (<i>Microdochium nivale</i>) on Harding Park/Fleming golf courses only in preparation for tournament play.	
Trimmit 25C	Growth regulator	100-1014	Paclobutrazol 22.3%	More hazardous (Tier II)	More Limited	For use only on golf courses in preparation for tournament play.	
Trinity Fungicide	Fungicide	7969-257	Triticonazole, 19.2%	Most hazardous (Tier I)	More Limited	For use on Harding Park/Fleming golf courses only in preparation for tournament play. May be used 1x/year in other golf courses on greens only.	
Turflon Ester	Herbicide	62719-258, 17545-8	Tricopyr, butoxyethyl ester 61.6%	More hazardous (Tier II)	Most Limited	Subject to "Restrictions on herbicides." Subject to "Restrictions on herbicides". Targeted treatment of golf course turf. HIGH PRIORITY TO FIND ALTERNATIVE.	
VECTOR CONTROL PRODUCTS							
Agnique MMF	Mosquito control - other	53263-30 (INACTIVE)	Poly(oxy-1,2-ethanediy),alpha-isodecyl-omega-hydroxy-phosphate 32%	More hazardous (Tier II)	More Limited	Use for late instar mosquito larvae and pupae, in combination with microbial products. USE UP EXISTING STOCK - NO LONGER SOLD	
Contrapest	Rodent contraceptive	91601-1	Triptolide, 0.001%; 4-vinyl cyclohexene diepoxide, 0.1%	Most hazardous (Tier I)	Least Limited	For long term reductions in rat populations.	

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Giant Destroyer (smoke bomb)	Rodenticide	10551-1	Carbon, 9%; Sodium nitrate, 50%; Sulfur, 38%	Most hazardous (Tier I)	Most Limited	Alternative to baits for rodents in burrows. Observe label limitations on endangered species and potential for human smoke exposure. Not for use beneath or adjacent to structures	
Mosquito control - microbial	Mosquito control - microbial	Various	<i>Bacillus thuringiensis</i> (Berliner or Israelensis) or <i>Bacillus Lysinibacillus sphaericus</i>	Least hazardous (Tier III)	Least Limited	Any microbial mosquito larvicide with active ingredients <i>Bacillus thuringiensis</i> (Berliner or Israelensis) or <i>Bacillus-Lysinibacillus sphaericus</i> is categorized as Least Limited.	CHANGED- Taxonomic reclassification of <i>Bacillus sphaericus</i> to <i>Lysinibacillus sphaericus</i>
Mosquito control products - IGRs	Mosquito control - IGRs	Various	S-Methoprene (5026)	Least hazardous (Tier III)	More Limited	Use for tanks with limited access, or other areas where frequent treatments are infeasible. For City catchment basins, microbial products are preferred. Not for use in estuarine environments except under control of San Mateo Mosquito Abatement District.	
Mosquito control products - oils	Mosquito control - other	Various	Highly refined petroleum distillate (mineral oil) - no aromatics	More hazardous (Tier II)	More Limited	Use as a pupacide for public health mosquito treatments.	
Rodent control - cholecalciferol block baits	Rodenticide	Various	Cholecalciferol	More hazardous (Tier II)	More Limited	See Site-Specific Limitations. For commensal rodent control only in situations with high public health concerns, where trapping is infeasible. In all cases, monitoring shall be used whenever feasible to minimize rodenticide use.	REMOVED- Not effective
Rodent control - diphacinone baits	Rodenticide	Various	Diphacinone	More hazardous (Tier II)	More Limited	See Site-Specific Limitations. For rat control only in situations with high public health concerns, where trapping is infeasible. Burrow baits not permitted in parks. In all cases, monitoring shall be used whenever feasible to minimize rodenticide use.	

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Rodent control - bromethalin blocks	Rodenticide	Various	Bromethalin 0.01%	Most hazardous (Tier I)	Most Limited	See Site-Specific Limitations. For use only in City-owned sewer lines, San Francisco International Airport Terminal Areas, or for commercial lessees on city properties other situations of high public health concern that are not adjacent to natural areas. In commercial establishments, use of product shall be a last resort after other, less-toxic measures have been implemented, including sanitation and trapping, and only where a significant public health hazard is recognized by the San Francisco Dept. of Public Health. In all cases, monitoring shall be used whenever feasible to minimize rodenticide use. HIGH PRIORITY TO FIND ALTERNATIVE.	CHANGED- Added "See Site-Specific Limitations." Replaced "for commercial lessees on city properties" with "other situations of high public health concern."

*For products exempt from US EPA registration (usually 'Generally Regarded as Safe' ingredients), SF creates its own product code.

**A product's tier ranking reflects hazard (the possibility of harm) but not risk (probability of harm).

***Use limitation type is an informal rating of risk (probability of harm), determined by considering a product's tier ranking, formulation, and typical use pattern.