



Department of Environmental Quality
Water Resources Division

**CHEMICALS APPROVED FOR USE UNDER
THE AQUATIC NUISANCE CONTROL GENERAL PERMIT FOR PONDS**

The following list of chemicals is approved for use under the Aquatic Nuisance Control General Permit for Ponds ANCG11-97, as amended. In order to have authorization to chemically treat waters of the state under the General Permit for Ponds, the permittee must be issued a 2012 Certificate of Coverage (COC) or COC Renewal by the Michigan Department of Environmental Quality (DEQ). Additional products may be approved in the future, pending registration with the U.S. Environmental Protection Agency and the Michigan Department of Agriculture and Rural Development and satisfactory review by the DEQ.

Category	Active Ingredient	Brand Name : Maximum Application Rate
Algae Control	chelated copper	Airmax Algae Defense, K-Tea, Symmetry NXG: 0.7 gal/acre-foot (planktonic/filamentous algae) 1.7 gal/acre-foot (macroalgae) Algi-Cure and Algimycin PWF: 1.06 gal/acre-foot (planktonic/filamentous algae) 2.13 gal/acre-foot (macroalgae) Captain, Captain XTR, Cutrine-Plus: 0.6 gal/acre-foot (planktonic/filamentous algae) 1.2 gal/acre-foot (macroalgae) Cutrine Plus Granular: 60.0 lbs/acre Formula F-30 Algae Control: 2.0 gal/acre-foot
	chelated copper (with surfactant)	Citrine Ultra: 0.6 gal/acre-foot (planktonic/filamentous algae) 1.2 gal/acre-foot (macroalgae)
	copper sulfate	All approved products (unless specified below): 2.6 lbs/acre-foot (planktonic/filamentous algae) 4.4 lbs/acre-foot (macroalgae) EarthTec, Aquatrols: 0.33 gal/acre-foot (planktonic algae) 0.55 gal/acre-foot (filamentous algae/macroalgae)
	endothall	Hydrothol 191: 2.2 pints/acre-foot Hydrothol 191 Granular: 11.0 lbs/acre-foot
	hydrogen dioxide	GreenClean Liquid Broad Spectrum Algaecide/Bactericide: 1.2 – 30.0 gal/acre-foot
	sodium carbonate peroxyhydrate	GreenClean Granular: 17.0 lbs/acre-foot (maintenance) 170.0 lbs/acre-foot (heavy growth) GreenClean PRO: 9.0 lbs/acre-foot (maintenance) 90.0 lbs/acre-foot (heavy growth) Phycomycin SPC Algaecide and Oxidizer: 100.0 lbs/acre-foot

(continued)

Category	Active Ingredient	Brand Name : Maximum Application Rate
Submerged Plant Control	2,4-D – granular	Aquacide: 60.0 lbs/acre-foot Navigate (area basis label): 200.0 lbs/acre Navigate (volume basis label): 56.8 lbs/acre-foot Sculpin G: 65.4 lbs/acre-foot
	2,4-D and triclopyr	Renovate LZR MAX , Renovate Max G: 93.7 lbs/acre-foot
	chelated copper	Copper-EDA, Current, Harpoon, Komeen, Airmax PondWeed Defense: 3.3 gal/acre-foot Nautique ¹ : 3.0 gal/acre-foot Harpoon Granular: 40-80 lbs/acre-foot of plant height
	diquat dibromide	Diquash ^{1,2} , Harvester ^{1,2} , Helm ^{1,2} , Knockout ^{1,2} , Littora ^{1,2} , Nufarm Diquat ^{1,2} , Redwing ^{1,2} , Reward ^{1,2} , Solera ^{1,2} , Tribune ^{1,2} , Tsunami ^{1,2} , Weedplex ^{1,2} : 2.0 gal/acre Weedtrine D ^{1,2} : 10.0 gal/acre
	endothall	Aquathol K: 1.9 gal/acre-foot Aquathol Super K Granular: 13.2 lbs/acre-foot Hydrothol 191 (liquid only): 1.0 gal/acre
	flumioxazin	Clipper: 2.1 lbs/acre-foot
	imazamox	Clearcast ¹ : 69.0 oz/acre-foot
	triclopyr	Navitrol ¹ , Renovate 3 ¹ : 2.3 gal/acre-foot Navitrol DPF, Renovate LZR, Renovate OTF: 67.0 pounds/acre-foot
Floating/ Emergent Plant Control	2,4-D – granular	Aquacide: 22.0 lbs/acre Navigate (area basis label): 200.0 lbs/acre Navigate (volume basis label): 21.0 lbs/acre Sculpin G: 65.4 lbs/acre-foot
	2,4-D and triclopyr	Renovate LZR MAX, Renovate Max G: 93.7 lbs/acre-foot
	diquat dibromide	Diquash ^{1,2} , Harvester ^{1,2} , Helm ^{1,2} , Knockout ^{1,2} , Littora ^{1,2} , Nufarm Diquat ^{1,2} , Redwing ^{1,2} , Reward ^{1,2} , Solera ^{1,2} , Tribune ^{1,2} , Tsunami ^{1,2} , Weedplex ^{1,2} : 2.0 gal/acre Weedtrine D ^{1,2} : 5 gal/acre
	flumioxazin	Clipper: 12.0 ounces/acre
	glyphosate	Accord ¹ , Aquamaster ¹ , Aqua Neat ¹ , AquaPro ¹ , Aqua Star ¹ , Avocet ¹ , Glyfos ¹ , Refuge ¹ , Rodeo ¹ , Shore-Klear ¹ : see product label for target species application rate
	glyphosate (including surfactant)	GlyphoMate 41: 8.5 pints/acre ShoreKlear-Plus: 2.6 gal/acre
	imazamox	Clearcast ¹ : 64.0 oz/acre
	imazapyr	AquaPier ^{1,2} , Gullwing ^{1,2} , Habitat ^{1,2} , Polaris AC Complete ^{1,2} , Polaris ^{1,2} : 6.0 pints/acre
	triclopyr	Navitrol ¹ , Renovate 3 ¹ : 8.0 quarts/acre Navitrol DPF, Renovate LZR, Renovate OTF: 67.0 pounds/acre
Additives ¹	n/a (adjuvants, sink/drift control)	AGRI-DEX: 4.0 pints/acre Cygnet Plus: 2.5 pints/acre-foot (submergent) 1.0 pint/acre (emergent) PolyAn: 1.0 gal/acre-foot PolyAn (emergent): 3-8 oz/100 gal spray solution TopFilm: 1.0 pint/acre
	n/a (water dyes/ colorants)	All Approved Dye Products: 0.01 gal/acre-foot (submergent tracer) 0.25 gal/acre-foot (submergent whole pond) 0.33 to 1.0 ounce/gallon concentrate (emergent tracer)

¹ Certain herbicide labels require or strongly recommend the use of additives to aid herbicide uptake, improve effectiveness, and minimize non-target impacts.

² Certification requirements may apply. See the product label.