

Munox® XL-Plus

PRODUCT USAGE GUIDELINES

Munox® XL-Plus is available as a safe, easy-to-handle liquid; Shipped in 5 gallon containers and 55 gallon drums.

Cell Counts: 1000 billion CFU/gallon

Shelf Life: 180 days at room temperature

Process Parameters: Environmental conditions for effective treatment

pH	5.0-9.0 (6.5-7.5 optimum)
Temperature	55-95°F (65-75°F optimum)
Salinity	0-5% (< 5% optimum)
Dissolved Oxygen	> 0.5 ppm (1-8ppm optimum)

APPLICATION / USAGE:

Bioaugmentation for industrial wastewater treatment plants, DAF tanks, separators and skimmers, aeration basins, lagoons, ponds, bioreactors. Using point-source application via a dosing pump, or manually, add XL-Plus in the following amounts according to your unique application(s):

- **Wastewater Treatment Plants:** Average daily flow to 1 MGD -
Add 5 gallons daily, week 1. Add 0.5 gallons daily thereafter.
Average daily flow above 1 MGD - Add 5 ppm daily
(5 gal. for each MGD flow) week one.
Add 0.5 ppm thereafter (1/2 gallons for each MGD flow).
- **Collection Systems – Per 100,000 GPD Flow:** Add 1 gallon daily week 1.
Add one-half (0.5) gallon weekly thereafter.
- **Lagoons – Per 1 million GPD Flow:** Add 2 gallons daily week 1.
Add 0.5 gallons daily thereafter.
- **Ponds – Per million gallons of volume:** Add five(5) gallons initially.
Add 5 gallons per month thereafter.
- **DAF Systems:** Add 5 ppm daily.
- **Oil/Water Separators & Skimmers:** Add 5 ppm daily.
- **For specific or severe problems contact Osprey Biotechnics: (800) 533-7785.**

PRODUCT SELECTION:

Choosing the correct product series of Munox® XL-Plus is easy:

1. Identify the contaminant(s) and select the product series from Selection Table on next page.
2. Following the usage guidelines above, determine monthly product to be ordered.

Munox® XL-Plus Product Line

Application	Contaminant	XL-Plus Series Recommended
BOD/TSS, FOG, odor, Food Processing waste, Organic Solvents, Petroleum Hydrocarbons	Dichlorobenzene Dichlorotoluene(2,5-) Methyl Ethyl Ketone Methylene Chloride Napthalene Flourene Benzene Oil & Grease (food) Toluene Xylene Crude Oils/Sludges Petroleum	Munox® XL Plus-1 (Series 1)
Citrus Juice Processing waste, Citrus-based cleaners, Terpene based solvents, mineral spirits	Isoprenoids Limonene Linalool Citronellol Terpene compounds	Munox® XL Plus-2 (Series 2)
Organic Nitrogen, Ammonia related odor (Poultry, Agriculture)	Ammonia Nitrate Nitrite	Munox® XL Plus-DN
Phenols, Chlorinated Aromatic hydrocarbons, Creosote, herbicides, Pesticides/Insecticides (PCP,Endrin,Aldrin/ (P- 2, 4-D, 2, 4, 5-T)	Anthracene Chlorotoluene(M-) Chlorotoluene(O-) Chlorotoluene Chloroform Chrysene Cresols (mixed) Fluorene Pentachlorophenol Phenanthrene Phenol BTEX	Munox® XL Plus-5 (Series 5)
Chlorinated Solvents (Aliphatic Hydrocarbons)	Di-N-Octylphthalate Dichloroethane(1,1-) Dichloroethane(1,2-) Dichloropropane(1,2-) Tetrachlorethane 1,1,1,1-) Trichlorethane(1,1,2-) Trichloroethylene Vinyl Chloride	Munox® XL Plus-6 (Series 6)