

MUNICIPAL & INDUSTRIAL WASTEWATER TREATMENT

## **Defoamers & Antifoams**



**E**ffluent foaming or excessive foaming in a treatment process is not only a detriment to the discharge quality but also to treatment operations. Often, the application of a defoamer/antifoam is all that is required to eliminate foaming issues.

Foaming, often caused by excessive phosphorus, residual surfactants, or young/old biomass, are the most prevalent forms of foaming conditions seen in many treatment processes. Correctly addressing these foaming issues can rid the treatment process outfall of unsightly scum improving the overall treatment process and ensuring that receiving stream quality standards are met.

Coyne Environmental is uniquely positioned with the most comprehensive collection of treatment options available to assist the municipal and industrial water and wastewater treatment industries in meeting your specific treatment goals.



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## **Defoamers & Antifoams**

Nocardia foaming is a tenacious, unsightly thick brown foam found in many biological processes which carries over into secondary clarifier and digester operations. Besides staining the surrounding surfaces, Nocardia reduces the transfer of oxygen in aeration zones and hinders settling in the clarification stages leading to TSS carryover. It also infiltrates the digester operations reducing efficiencies and causes operational issues such as capacity limitations, overflowing, and gas production. Damage can also occur to various treatment processes due to entrained air. Reducing foaming due to Nocardia enhances treatment parameters but also benefits aesthetic and housekeeping issues allowing for a cleaner operation.

Other wastewater treatment applications such as solids separation operations are also treated with defoamers. By dosing in drain lines from DAF's, belt thickeners, and points of discharge from centrifuges, filtrate/centrate lines can be kept free of foam and flowing evenly without backups and overflows. Our lines of nontoxic defoamers are highly effective in biological processes including UNOX/ HPO, MBR's, and IFAS/MBBR applications.

In addition, general foaming is a growing concern in today's wastewater treatment processes. Many household and industrial cleaning products are laden with surfactants added to enhance their performance capabilities. Unfortunately, these same chemical additives and complex chains are difficult to break down in the biological process, adding to one of today's many treatment issues. Defoamers are the answer to successful treatment.

When selecting the appropriate defoamer treatment program, there are many treatment variables to consider (pH, temperature, agitation, application point, etc.). The chart below reflects the most popular products we offer. We also offer a full line of silicone defoamers, both Food and Technical grades. Our Coyne Environmental Applications Specialist are available to assist you in your decision making process. Please call: **215-785-3000**. Or visit us at: **www.coyneenvironmental.com** 

	FOAM FREE	FOAM FREE 2	FOAM FREE 3	FOAM FREE 5	FOAM FREE 10S	FOAM FREE 13	FOAM FREE 16	FOAM FREE 40	FOAM FREE 60	FOAM FREE 410	FOAM FREE <b>450</b>	FOAM FREE 460
AERATION BASINS   BIOLOGICAL FOAM												
AERATION BASINS   SURFACTANT FOAM												
AERATION BASINS   HYBRID FOAM			-				-					
SLUDGE DIGESTERS												
NUTRIENT REMOVAL PROCESSES	-		-									
BIOFILM PROCESSES												
THERMOPHILIC WWT												
MEMBRANE SYSTEMS												
LOW DISSOLVED OXYGEN												
INDUSTRIAL PRETREATMENT												
EQUALIZATION												
EFFLUENT OUTFALL												
BRACKISH WATER												
DAIRY / POULTRY WWT												
PULP / PAPER WWT	-					-			-			-
CHEMICAL MIX TANKS												
COOLING TOWERS	-											
BOILER WATER TREATMENT												

#### **CES FOAM FREE PRODUCTS**

# Coyne Chemical Environmental Services provides practical, economical, and user-specific solutions to virtually any municipal or industrial water and wastewater treatment challenge.