

Advance Biotechnologies of Canada

"Advanced Microbiology for a Clean, Safe Environment"

ADB111 Chemical Waste

ADB111 contains a specially formulated range of adapted, high-performance microorganisms for use in biological wastewater treatment of chemical wastes. As well as microorganisms, ADB111 contains a micronutrient blend specially selected for chemical wastes. This micronutrient blend provides a complete formulation for maximum biological activity and reacts with chemical waste to produce biological enhancers.

When used as directed ADB111 is safe and is harmless to people, clothing and the environment and is completely biodegradable.

When applied to effluent treatment facilities, ADB111 helps to establish a biomass capable of handling these difficult wastes.

Specifications:

Form:	Free-flowing granular powder
Color:	Brown or Blue
Nutrient Content:	Biological nutrients & stimulants
Plate Count:	5 billion per gram

Application Instructions:

Treatment Plants

<i>Flow Rate</i>	<i>Initial Dosage</i>	<i>Maintenance**</i>
Up to 0.1 lps	½ kg. per day for 3 days	½ kg. per week
Up to 0.5 lps	½ kg. per day for 3 days	1 kg. per week
Up to 2 lps	5 kg.*	1½ kg. per week
Up to 5 lps	8 kg.*	2 kg. per week
Up to 25 lps	15 kg.*	¼ kg. per day
Up to 50 lps	25 kg.*	½ kg. per day
Up to 100 lps	50 kg.*	1 kg. per day
Up to 500 lps	50 kg. per 100 lps*	1 kg. per 100 lps per day
Up to 1200 lps	50 kg. per 100 lps*	¾ kg. per 100 lps per day
Up to 10,000 lps	30 kg. per 100 lps*	½ kg. per 100 lps per day

* Spread this initial dosage out over the course of 10 days.

** Add as regularly as possible. If it is required to miss one day, add that day's product with the next dosage.

Dosage rate will vary with flow rates, retention times and system variations. The rates above are for a typical, well maintained system.

Activated Sludge Systems

Activated Sludge Systems include various process flow sheets for example: Extended Aeration, Contact Stabilization, Step Aeration, Oxygen Activated Sludge. The application rate for all products is based on the average daily flow rate to the aeration basin, excluding the return sludge stream. For seasonal or widely fluctuating flows, contact your BIO-SYSTEMS technical representative.

Trickling Filter and Rotating Biological Contactors

The application rate for all products is based on the average daily flow rate to the filter or contactor, excluding any recirculating process stream. For seasonal or widely fluctuating flows, contact your BIO-SYSTEMS technical representative.

Lagoon Systems

- For aerated lagoon systems, the application rate based on the average flow to the lagoon.
- For facultative lagoon systems, the application rate is based on the lagoon surface area:

Day 1 through Day 5	20 kg. per 10,000 cubic meters per day
Day 6+	2 kg. per 10,000 cubic meters per week
- For anaerobic lagoons, the application rate is based on the total volume of the anaerobic lagoon.

<200,000 liters	1 kg. - 2x per week per 10,000 liters
>200,000 liters	½ kg. - 1x per day per 10,000 liters
- For lagoons in cold climates, commence program when the water temperature is a least 50oF (11oC)

Benefits of ADB111:

- Helps start-up in new plants
- Improves effluent quality
- Reduces plant upsets
- Increases overall efficiency
- Controls filaments
- Lowers odors and foam

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