



# PRODIGYBIO

## Why do I need a Prodigy Bio?

The Prodigy Bio cleans and decontaminates any surface while capturing all runoff and contaminants. It can even work upside down.

The Prodigy Bio specializes in Nuclear, Flood, Fire, Bio, Hazmat, and Abatement. Biological waste is cleaned four different ways, then filtered allowing for standard discharge. Nuclear waste, is filtered up to nine times through a Stainless filter and all other debris through filtration as small as .03 micron.

The Prodigy Bio also allows additives such as RAdOut, Boric Acid, Iodine, Strong Bases, Boron Carbide, or virtually any other compounds to be sprayed in the Clean and Capture process.

## Capabilities

- The Chemical Injection System allows for virtually any chemical to be applied hot and with pressure, such as Quaternary Disinfectants, Phenols, RAdOut, Bleach, Acids, Caustic Soda, Refresh, etc. with fresh or salt water
- **80% more vacuum** than most large truck mounted machines
- **Four times the airflow** and 21 inches H.G. of vacuum.
- **Four times the capacity** of most pressure washer water pumps
- **Twice the heat** to assist in sterilization and cleaning. (Up to 90,000 BTU)
- **4000 PSI of working pressure** at the tools
- **Stainless Steel throughout**, including Holding Tank, Heat Exchangers, Mufflers, Exhaust System, Machine Panels and more to facilitate Cleanliness / Sterilization.
- **A Biomercinator** that purees Biohazard/Hazmat Waste with a disinfectant and heat, sending the waste to a stainless steel holding tank where it is treated with Ozone and UV light prior to disposal. (Usually allowing sanitary sewage disposal)
- **6000 gallon per hour Pump Out** pumps treated waste to a drain or secondary tank allowing unlimited disposal of anything from dirty water to Nuclear Waste.
- **Cleaning / decontamination of itself**, its hoses, and attachments with Clean and Capture technology.
- **Remote operation or under disaster conditions**, The Prodigy Bio can provide its own clean water, 120V. of clean AC. power, and can operate on Gas or Propane Tanks with the flick of a switch.(Diesel available.)



## Specifications

Dimensions	W 34.5", H 40", D 42" (including waste tank)
Weight:	475 lbs. (with tank)
Frame:	Powder-coated high strength steel
Engine:	23 H.P. Vanguard/Honda overhead valve
Water Pump:	Oil Bath at 6.8gpm at 4000P.S.I.
Heating system:	Stainless steel 3 element exchanger
Recovery tank:	70 Gallon heavy-duty stainless steel tank
Hoses:	1000ft. vacuum +1000ft solution hoses
Instruments:	Rugged marine gauges
Wand:	Two-Jet stainless steel S-bend wand with bypass
S.O.V.C.	Included
Construction:	Stainless steel panels
AC	120volts 20amp True Sign Wave



# PRODIGYBIO

## Chemicals

The PRODIGY BIO special chemical\* that removes radioactive isotopes (atoms) from aqueous solutions that threaten both human health and the environment, including fission byproducts (e.g. Cesium, Stront, Yterium, Cobalt, etc), indicators of failed fuel (e.g. cesium, strontium, and technetium), and effluent release drivers (e.g. nickel, iodine, cobalt, antimony). The inorganic media is radiation resistant mitigating the stability concerns associated with organic ion exchange resin under high radiation applications. Unlike conventional media our chemicals (RadOut, RadCap, and Refresh) have low sensitivity to pH, salt water, and the presence of surfactants (e.g., soap) in wash waters.

## RECORD SHEET • numbers reflect technology prior to recent advancements.

SAMPLE	SURFACE TYPE	GAMMA				BETA		
		BEFORE	AFTER	AFTER	REAL DECON %	BEFORE	AFTER	AFTER BETA
3	ASPHALT ROAD 1ST PASS	135	67	50.4%	151.1%	2150	315	85.3%
3	ASPHALT ROAD 2ND PASS	135	67	50.4%	151.1%	2150	315	85.3%
4	CONCRETE WALL	65	55	15.4%	33.3%	305	65	78.7%
4	CONCRETE LEDGE	50	45	10.0%	33.3%	1450	275	81.0%
5	BENCH DECK	112	35	68.8%	100.0%	2870	255	91.1%
6	PLAYING FIELD DIRT PAD	84	55	34.5%	91.5%	420	220	47.6%
6	PLAYING FIELD DIRT	200	150	25.0%	45.5%	400	260	35.0%
7	HOT SPOT	7100	320	95.5%	96.7%	4100	500	87.8%
8	TENNIS COURT AVERAGE	240	109	54.6%	87.3%	810	197	75.7%

REAL DECONTAMINATION ACHIEVED. BACKGROUND CORRECTED. ACTUAL DECONTAMINATION MAY BE UP TO 25% BETTER DUE TO CROSS TALK

BACKGROUND CORRECTION	90
VERTICLE CONCRETE CORRECTION	35
PLASTICS BACKGROUND CORRECTION	25

- *These is the actual results from Fukushima Japan. The "Real Decon" reflects the numbers after background levels had been accounted for.*

## Continuing Development

- Powerplus is always pushing the cutting edge of technology in radiation remediation. Our latest field and lab tests have proven radiation removal to be in excess of 75%!

## Features

- 1. Nuclear Waste Pick-Up
- 2. Decontaminates Dirt, Soil, and Sand
- 3. Decontaminates Trees, Bushes, and Crops
- 4. Sterilize / Cleans itself / Prion Reduction
- 5. Allows virtually any chemical to be ran through the machine
- 6. Allows Clean and Capture (multi surface decontamination)
- 7. Pressure wash with chemical and heat up to 4000 P.S.I.
- 8. Stainless Steel Machine and Waste Tank (allows for Decontamination of machine)
- 9. Personnel / Equipment Decontamination

## Optional

- (Clean & Capture is Hot High-Pressure Decontamination and Cleaning inside the confines of a tool head with no over spray or runoff)
- Advanced Filtration System for Nuclear Waste.
- Silencing Packages for ultra quiet operation
- Dual Fuel (Propane or Gas) Diesel available
- Hose Cleaning and Decontamination/Sanitizing tool
- Auto Pump Out 60,000 GPH that handles mud, sewage, and small rocks while filters any larger rocks or debris.
- Drain Hydro-Jetting attachments
- Drain Clean out attachments (Scum Sucker)
- Hard Surface cleaning attachments for (Wood, Tile, Granite, Marble, Concrete, Vct. Ect.)
- Clean and Capture Tools :
- Pressure Washing Guns
- Upholstery and Draperies tools