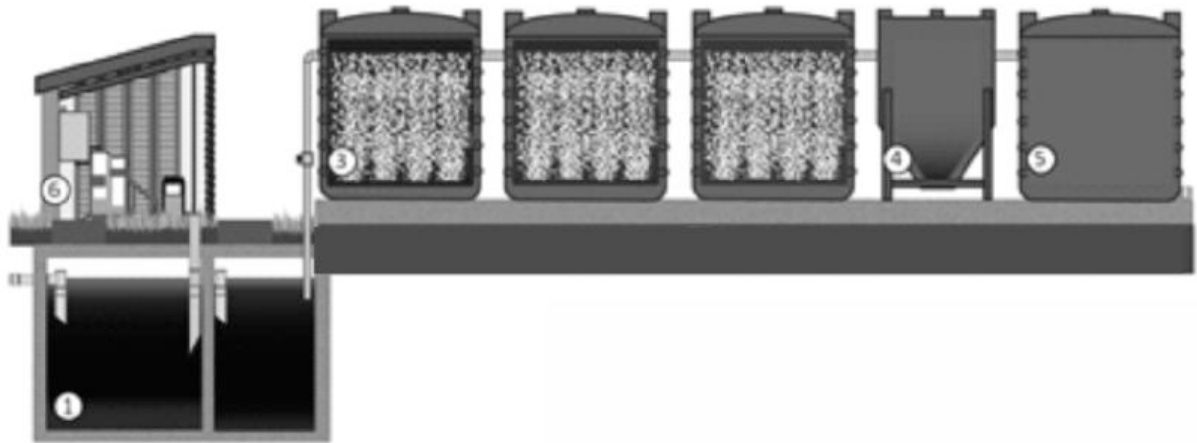


DATA SHEET

Waste Water Treatment Plants

BIOPURE



The Enpure wastewater treatment system is an advanced waste water purification technology designed to deliver effective sewage treatment for large communities. The process provides for full Carbon and Nitrogen removal to produce high quality effluent that is odour free, suitable for reuse such as in irrigation, outdoor washing and safe discharge into water courses. The treatment process is as below;

1. Primary Treatment: - The waste water, both black and grey enter the primary treatment chamber where some solids settle and the liquid effluent is passed through a brush filter to the second tank where more solids are filtered preventing passage to the reactors.

2. Buffer Tank: The buffer chamber regulates the amount of effluent that is fed into the reactor tanks. The plant runs at maximum efficiency when the effluent stream is at a steady, constant rate.

3. Aeration Reactor: The effluent enters the reaction chambers where countless bacteria lodged onto the fixed film media breakdown the waste in the presence of oxygen provided by an air blower. This fixed-film media is so designed to ensure that the system works even in the most difficult conditions of overloading, power cuts, downtime, flooding and toxic shock. It also ensures low sludge wastage reducing sludge removal to a minimum thereby saving costs

4. Clarifier Tank: The effluent then passes to the clarifier tank where sludge settles at the bottom and clear water collects at the top.

5. Storage Tank: The final product, a clear, odorless and sanitized effluent is collected in this tank ready for discharge either by means of irrigation or onto natural watercourses.

Standard Enpure systems are for above ground installation using plastic poly tanks for each of the treatment stages. Alternative configurations for inground installation using a concrete structure or containerised for mobile systems are available.

Features include:-

- Reduced vibration and low noise due to the positive displacement blower at aeration chamber.
- Vertical configuration blower thereby saving space.
- Energy efficient over most conventional waste water treatment technologies.
- Modular design allowing for scaling up when higher capacity is required.
- The design and layout is flexible and can be suited to customer requirements.

Empure Purification results*:

BOD: 4mg/l, 99% **COD:** 26mg/l, 96% **TSS:** 3mg/l, 99%

*Testing done in conformity to EU Norm EN 12566-3, testing Institute: PIA in Aachen, Germany.

OPERATING CONDITIONS:

Medium: Organic waste not containing aggressive medium

Ambient Temperature: 25°C

Medium Temperature: 25°C



EQUIPMENT SPECIFICATION

Model*	50PE	70PE	100PE	150PE	200PE	250PE	350PE	450PE	500PE	750PE
Population Equivalent (PE)	75	75	150	150	200	250	350	450	500	750
Flow, m ³ /day	7.5	12	15	23	30	38	53	68	75	112
Organic Loading (Kg/BOD5/day)	3	4.5	6	9	12	15	21	27	30	45
Nitrogen Loading (Kg/NH/day)	0.4	0.6	0.8	1.2	1.6	2	2.8	3.6	4	6
Length, m	4.5	5.5	7.5	7.5	7.5	9	10	12	12	15
Width, m	3.7	3.7	4.2	4.2	5	5	5.5	6.5	6.5	6.5
Depth	2	2	2	2.5	2.5	2.5	2.5	2.5	3	3
Foot Print (m2)	17	20	32	32	38	45	55	78	78	98
Total Tank Volume m ³	33	40	63	79	94	112	138	195	234	293
Installed Power kW	0.65	0.9	1.2	1.55	1.85	1.85	1.85	2.35	3.5	3.7

<p>KENYA Nairobi - Head Office Tel: (254 20) 6968000 headoffice@dayliff.com Nairobi - Westlands Tel: (254 20) 44460116 westlands@dayliff.com Nairobi - Downtown Tel: (254) 715 439 392 downtown@dayliff.com Eastleigh Tel: (254) 711 079 845 eastleigh@dayliff.com Uthmanya Tel: (254) 780 575745 uthmanya@dayliff.com Nairobi - Karen Tel: (254 20) 3883513 karen@dayliff.com Ongata Rongai Tel: (254 20) 2400146 ongatarongai@dayliff.com Kiambu Tel: (254) 701 640 309</p>	<p>Thika Tel: (254 67) 2220084 thika@dayliff.com Kitengela Tel: (254 45) 3123094 kitengela@dayliff.com Machakos Tel: (254 44) 2021668 machakos@dayliff.com Kitui Tel: (254) 701 683 289 kitui@dayliff.com Embu Tel: (254) 780 455 512 embu@dayliff.com Meru Tel: (254 64) 3131033 meru@dayliff.com Nanyuki Tel: (254 62) 2030018 nanyuki@dayliff.com Garissa Tel: (254 46) 2102620 garissa@dayliff.com Naivasha Tel: (254 30) 2030610</p>	<p>Lodwar Tel: (254 724) 248602 lodwar@dayliff.com Eldoret Tel: (254 53) 2061306 eldoret@dayliff.com Nakuru Tel: (254 51) 2213248 nakuru@dayliff.com Narok Tel: (254) 701 683 289 narok@dayliff.com Kakamega Tel: (254 58) 2031889 kakamega@dayliff.com Bungoma Tel: (254) 740 048 514 bungoma@dayliff.com Kisumu Tel: (254 57) 2024763 kisumu@dayliff.com Kisii Tel: (254 58) 2030949 kisii@dayliff.com</p>	<p>KENYA COAST Mombasa - Main Office Tel: (254 20) 2040432 mombasa@dayliff.com Mombasa - Downtown Tel: (254) 780 567 379 mombasadowntown@dayliff.com Malindi Tel: (254 42) 2120425 malindi@dayliff.com Diani Tel: (254 40) 3202181 diani@dayliff.com Lamu Tel: (254 20) 265105256 lamu@dayliff.com Nyali Tel: (254 20) 2443357 nyali@dayliff.com Voi Tel: (254 20) 2028284 voi@dayliff.com Mtwapa Tel: (254) 798 478 113</p>	<p>UGANDA Kampala - Main Office Tel: (256 414) 3463378 kampala@dayliff.com Kampala - Nakasero Tel: (256 380) 734633 nakasero@dayliff.com Kampala - Shauri Moyo Tel: (256 414) 660 770 shaurimoyo@dayliff.com Gulu Tel: (256 471) 433041 gulu@dayliff.com Mbarara Tel: (256 753) 840 080 mbarara@dayliff.com Jinja Tel: (256 382) 001556 jinja@dayliff.com SOUTH SUDAN Juba Tel: (211 958) 397 070 juba@dayliff.com</p>	<p>TANZANIA Dar es Salaam - Main Office Tel: (255 22) 211251556 darsalasaa@dayliff.com Dar es Salaam - Kariakoo Tel: 2164867 kariakoo@dayliff.com Arusha Tel: (255 27) 254731718 arusha@dayliff.com Zanzibar Tel: (255 24) 223466001 zanzibar@dayliff.com Mwanza Tel: (255 28) 25419712 dksmwanza@dayliff.com Dodoma Tel: (255) 753 506 505 dodoma@dayliff.com</p>	<p>ZAMBIA Lusaka - Main Office Tel: (260 21) 28851011 lusaka@dayliff.com Lusaka - ChaChaCha Tel: (260 21) 842350 Ndola Tel: (260 212) 6109367 ndola@dayliff.com Kitwe Tel: (260 212) 22174767 kitwe@dayliff.com Livingstone Tel: (260 213) 320002/234 livingstone@dayliff.com Solwezi Tel: (260 218) 821822 solwezi@dayliff.com</p>	<p>RWANDA Kigali Tel: (250) 252 504039 kigali@dayliff.com Rubavu Tel: (243) 814 911999 rubavu@dayliff.com ETHIOPIA (Associate) Addis Ababa Tel: (251 11) 815934164 ethiopia@dayliff.com DRC Lubumbashi Tel: (243) 978 115412/ 852 758553 drc@dayliff.com</p>
--	--	--	---	---	---	---	--