TREATMENT PERFORMANCE RESULTS

PPR Carlow Concrete Tanks
Drumbeerry, Buncloody, Co. Wexford, Ireland

EN 12566-3
Results corresponding to EN 12566-3 and S.R. 66
PIA-SR66-1601-1003

Biogreen BAF
Fluidised bed reactor

<table>
<thead>
<tr>
<th>Nominal organic daily load</th>
<th>0.22 kg/d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal hydraulic daily load</td>
<td>0.72 m³/d</td>
</tr>
<tr>
<td>Material</td>
<td>Concrete</td>
</tr>
<tr>
<td>Watertightness</td>
<td>Pass</td>
</tr>
<tr>
<td>Structural behaviour</td>
<td>Pass (also wet conditions)</td>
</tr>
<tr>
<td>Durability</td>
<td>Pass</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment efficiency (nominal sequences)</th>
<th>Efficiency</th>
<th>Effluent</th>
</tr>
</thead>
<tbody>
<tr>
<td>COD</td>
<td>89.0 %</td>
<td>66 mg/l</td>
</tr>
<tr>
<td>BCD₅</td>
<td>93.5 %</td>
<td>19 mg/l</td>
</tr>
<tr>
<td>NH₄-N</td>
<td>92.6 %</td>
<td>8 mg/l</td>
</tr>
<tr>
<td>SS</td>
<td>77.9 %</td>
<td>25 mg/l</td>
</tr>
</tbody>
</table>

Number of desludging: Not more than once
Electrical consumption: 2.1 kWh/d

Performance tested by:

PIA – Prüfinstitut für Abwassertechnik GmbH
(PIA GmbH)
Hergenrather Weg 30
52074 Aachen, Germany

This document replaces neither the declaration of performance nor the CE marking.
Biogreen BAF range and its referring test reports:

<table>
<thead>
<tr>
<th>Population equivalent (PE)</th>
<th>Drawing of model of the range</th>
<th>Watertightness (EN 12566-3 Annex A)</th>
<th>Treatment Efficiency (EN 12566-3 Annex B)</th>
<th>Structural Behaviour (EN 12566-3 Annex C)</th>
<th>Durability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Type Test (ITT)</td>
<td></td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>PIA2012-WD-1203-1017</td>
<td>PIA2012-109B04</td>
<td>PIA-2009-ST-AT0710-1012</td>
<td>PIA2016-DH-1601-1003.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For wet ground conditions also, installation depth 1.25 m from inlet invert</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Pass</td>
<td>Pass</td>
<td>For wet ground conditions also, installation depth 1.25 m from inlet invert</td>
<td>Pass</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PIA2012-WD-1203-1017</td>
<td>Range conformity according to S.R. 66:2015</td>
<td>For wet ground conditions also, installation depth 1.25 m from inlet invert</td>
<td>PIA2016-DH-1601-1003.01</td>
</tr>
</tbody>
</table>
4 PE system - 1230 gallon tank

**DRAWING TITLE:**
Aqua Star
4 PE system
5,458 m³ (1200 Gallon) Tank
General Layout
Sheet 1 of 1

**Drawn By:** T. Armstrong

**Date:** 29/08/00

**Revisions:** 0

---

**PLAN VIEW - PRECAST CONCRETE LEAF**
Scale 1:36

**PLAN VIEW - PRECAST CONCRETE TANK**
Scale 1:36

**ISOMETRIC VIEW**

**PRECAST CONCRETE COVER SLATS**

**300mm LEVEL - COMPACTED CRUSHED ROCK BASE - TYP.**

**STANDARD 1200 GALLON SYSTEM - SECTION**
Scale 1:36

---

**Standard tank weight:**
4.20 tonnes without lid,
5.50 tonnes including lid.
Carlow Concrete Tanks

DRAWING TITLE:
STANDARD 4.75m³
(1000 GALLON)
Septic Tank

Biogreen 8PE CHAMBER

ROOF PLAN
Concrete Slabs
Pedestrian Traffic

ROOF PLAN
Concrete Slabs
Pedestrian Traffic

PRIMARY CHAMBER
Tank Surface Area 3.9m²
Tank Volume Under
sediment layer 5.0m³

AERATION CHAMBER
Tank Surface Area 4.1m²
Tank Volume Under
sediment layer 5.0m³

SETTLEMENT CHAMBER
Tank Surface Area 4.1m²
Tank Volume Under
sediment layer 5.0m³

Gravity Discharge
(pump chamber supplied if required)

ELECTRICAL BOX
PRECAST CONCRETE
COMPRESSOR COVER

Gravity Discharge
(pump chamber supplied if required)

Sludge
Return Pipe

Air L/R Sludge
Return Pipe

Diffusers

SECTION