

## EU Declaration of Conformity



**This declaration is issued following the Directive 89/106/EEC, relating to construction products**

The producer – **Traidenis UAB, Pramonės st. 31B, LT-62175, Alytus, Lithuania, company code 249910930** – declares under our sole responsibility that the product:

### **BIOLOGICAL TREATMENT PLANTS OF DOMESTIC WASTEWATER**

**NV-1a, NV-2a, NV-3a, NV-4a; NV-1m, NV-2m, NV-3m, NV-4m; NV-1t, NV-2t, NV-3t, NV-4t type**

meet the requirements of the EU Directive 89/106/EEC and all the provisions of Annex ZA to the standard EN 12566-3:2006+A1:2009 “*Small wastewater treatment systems for up to 50 PT – Part 3: Packaged and/or site assembled domestic wastewater treatment plants*”, if they are installed and maintained according to the requirements, provided in the technical passport of the product by Traidenis UAB.

**Background for declaration:** initial type tests and continuous production control, performed by the notified body – public company Certification Centre of Building Products (li. – Statybos produkcijos sertifikavimo centras, SPSC), Wastewater Treatment Plant Testing Laboratory (li. – Nuotekų valymo įrenginių laboratorija), Linkmenų st. 28, LT-08217 Vilnius, Lithuania, Notification No. 1397) and the producer’s laboratory – Traidenis UAB (Pramonės st. 31B, LT-62175 Alytus, Lietuva).

**After testing of wastewater treatment plants, it has been confirmed the following:**

Parameter	Unit of measurement	Defined value	Name of the body conducting tests	Reference number of test protocols
BOD <sub>7</sub>	%	94.3	State company SPSC	1397-CPD-002/B
ChDS	%	88.9	State company SPSC	1397-CPD-002/B
SS	%	95.1	State company SPSC	1397-CPD-002/B
N	%	86.8	State company SPSC	1397-CPD-002/B
P	%	58.8	State company SPSC	1397-CPD-002/B
NH <sub>4</sub> -N	%	87.8	State company SPSC	1397-CPD-002/B
Mechanical resistance by applying reference load	-	Sufficient	State company SPSC	1397-CPD-004/C.5 1397-CPD-003/6.2
Tightness	-	Treatment plant is water-tight	State company SPSC Traidenis UAB	1397-CPD-001/A.3/P1 TR10/06/12/2
Initial type tests (general dimensions, inlets, outlets and connections, accessibility)	-	Correspond	Traidenis UAB	TR10/06/12/1

### **Product description, purpose, usage**

Biological wastewater treatment plant is constructed from two chambers, present in one tank. At first, wastewater, flowing into the plant, enters into the internal chamber, where it is mixed with activated sludge by the help of air. Compressed air is necessary for supporting life of activated sludge and internal recirculation of treated wastewater. Air is provided by the help of the compressor (the blower). Biological treatment, i.e. treatment with activated sludge, is based on microorganisms’ activities. Decomposition of organic pollutants is based on microorganisms, which are in a free state, and on fixed microorganisms, which are fixed on the bioload. Purpose of the process is to bind soluble, colloidal and biogenic substances from wastewater into activated sludge and to separate active sludge. Microorganisms metabolise (“eat up” and decompose) and destroy organic substances. Decomposition of organic materials and formation of activated sludge takes place in the aeration section. Mixture of activated sludge from the aeration chamber enters the external chamber (the secondary settling vessel), where, due to gravity forces, activated sludge separates and falls down into the bottom part of the plant and the separated, treated water lifts up and drains away. If the mass of microorganisms increases, the amount of activated sludge also increases. Excess sludge is discharged in the following manner: into bags of dewatered sludge (symbol **m**), into the nearly mounted sludge thickening device (symbol **t**), pumped-off by the help of assenisation machine (symbol **a**). The air blower is mounted nearby the plant.

*The plant is intended for treatment of domestic or similar wastewater from the kitchen, bathroom, toilet and other similar-purpose facilities. Avoid entering of rain and surface waters into the unit.*

Traidenis UAB  
Managing Director  
18 October, 2010




Sigitas Leonavičius