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Client Cod. Ci. 6211  
**DIRECTA PLUS SpA**  
Via Cavour 2,  
22074 Lomazzo (CO)  
Italy

**SUBJECT: Determination of GRAPHENE PLUS absence of toxicity for aquatic fauna**

**Graphene Plus - Sample Information**

Received: 08/10/2013  
By: Directa Plus SpA, Via Cavour 2, 22074  
Lomazzo (CO), Italy  
Sample type: Graphene Plus\_Basic G+

**Artemia franciscana - Sample information**

Received: 04/10/2013  
By: Micro Bio Test inc. Belgium  
Sample type: ARTOXKIT, n° AF106  
Sample expiry date: 28/02/2014  
Sample age: 30 h

**Methods**

Italian Environmental Ministry, Decree of 25<sup>th</sup> February, 2011 (SO n. 87, GU 31<sup>th</sup> March 2011 n. 74); APAT-IRSA-CNR 8060 (2003) "96 hours toxicity test with *Artemia franciscana*".

**Results**

Tab. 1 – Toxicity of Graphene Plus on Artemia sp. (96 h exposure). Sample: 20 g/l eluted Graphene Plus in synthetic sea water (48 h; 25°C). Blank: synthetic sea water (in accordance with table n°1, Annex 4, Decree of the Italian Environmental Ministry, 25/02/2011). SO = n° of Static Organisms after 96 h of exposure; NS = Not Statistically Significant; NSD = Not Statistically Different if compared with the blank sample. Test Validity: the percentage of static organism in Blank sample must be ≤ 10%.

	Exposed Organism in each Replica	Total Exposed Organism	Rep.1 SO	Rep.2 SO	Rep.3 SO	Rep.4 SO	Rep.5 SO	Rep.6 SO	SO	VC%	Test $\chi^2$	Fisher's exact test
Blank	10	60	1	0	1	1	0	1	4	77,4596669	NS	-
Samp. 1	10	30	1	0	0	-	-	-	1	173,205081	NS	NSD
Samp. 2	10	30	0	1	1	-	-	-	2	86,6025404	NS	NSD
Samp. 3	10	30	0	2	1	-	-	-	3	100	NS	NSD

The number of static organisms in the 3 samples is not significantly different from that of the blank.

The Biologist  
Dr. Luca Caslini



The Laboratory Responsible  
Ind. Per. Giovanni Tentori



Merone (CO), 25<sup>th</sup> October, 2013

The results reported in this document refers to the only sample which is the object of the tests.  
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