







Responsibility and recognition



Performing competent authority:

Crop Protection Technology
DISAFA – University of Torino
Via Leonardo da Vinci, 44
I -10095 Grugliasco (TO) - ITALY

This test is recognized by the ENTAM members:

	Generalitat de Catalunya Departament d'Agricultura, Alimentació i Acció Rural	<u>CMA - Administració de la Generalitat de Catalunya, Centre de Mecanització Agrària</u> – SPAIN	...
	<u>FJ-BLT HBLFA</u> Francisco <u>Josephinum Wieselburg</u> - Biomass, Logistics, Technology – AUSTRIA	026/14	
	<u>IRSTEA - Institut National de Recherche en Sciences et Technologies pour l'Environnement et l'Agriculture</u> (formerly CEMAGREF) – FRANCE	IRSTEA/ CEMAGREF/ ENTAM/14/005	
	<u>JKI - Julius Kühn-Institut</u> (formerly BBA) – GERMANY	ENT-I-05/14	
	<u>MGI - MEZOGAZDASÁGI GÉPESÍTÉSI INTÉZET</u> – HUNGARY	I-88/2014	
	<u>PIMR - Przemysłowy Instytut Maszyn Rolniczych</u> – POLAND	PIMR110/ ENTAM/14	



ENTAM - Test Report



Trade mark:
Model:
Equipment type:
Field of application:
Pressure range:

GEOLINE
MAG1
hollow cone nozzle
Air-assisted sprayers
5 – 12 bar

Manufacturer:
Tecomec srl
Strada della Mirandola, 11
I - 421224 Reggio Emilia

Test report: 46a.032
June 2014

Test results

This nozzle has been tested without accessories.
This nozzle is appropriate for the use of spraying with air-assisted sprayers with a liquid pressure of 5 - 12 bar.

- The comparison of single nozzle distribution pointed out a uniformity index of 0.61 (5 bar). The maximum allowed uniformity index is 1.0.
- The deviation between the measured single nozzle flow rate and the flow rate table (5 bar) is between -3.4% and 3.6%. The maximum allowed deviation is 5%.
- The max. deviation of the single nozzle flow rates from the mean flow rate is between -4.3% and 2.6%.
- A spray angle between 69° (at 5 bar) and 81° (at 12 bar) was determined.
- The orifice material is ceramic.
- The nozzle fulfils the discharge rate requirement according ISO 10625 (0.3 l/min at 3 bar).

Free download of the complete test report under: www.ENTAM.net
or: www.ENAMA.it

Test results

Pressure (bar)	Discharge rate without accessories (l/min)	Droplet size - D50 (µm) ²⁾
5.0	0.36	83.1
8.0	0.46	74.0
12.0	0.57	68.2

Tab. 1: Discharge rate and droplet size depending on liquid pressure.

- 1) On a spray boom with 50 cm nozzle distance
- 2) Measured with Malvern - Spraytech (additional information)

The tested nozzles (20) were picked out at random of a stock of 200 nozzles. Testing takes place according to the Technical Instructions for ENTAM-Tests of Spray nozzles, rel.1.

This procedure was developed by the competent testing authorities of the European countries participating in ENTAM and is based on the ISO 5682 standard: "Equipment for crop protection – Spraying equipment; Part 1 Test method for sprayer nozzles" and on EN –ISO 16119 standard: "Agricultural and forestry machinery – Sprayers and liquid fertilizer distributors – Environmental protection; Part 2". This test is only a technical performance test which takes place without an accompanying filed test. The test results apply only to the tested appurtenances of the sprayer. Statements on the behaviour of different appurtenances cannot be derived from these results.