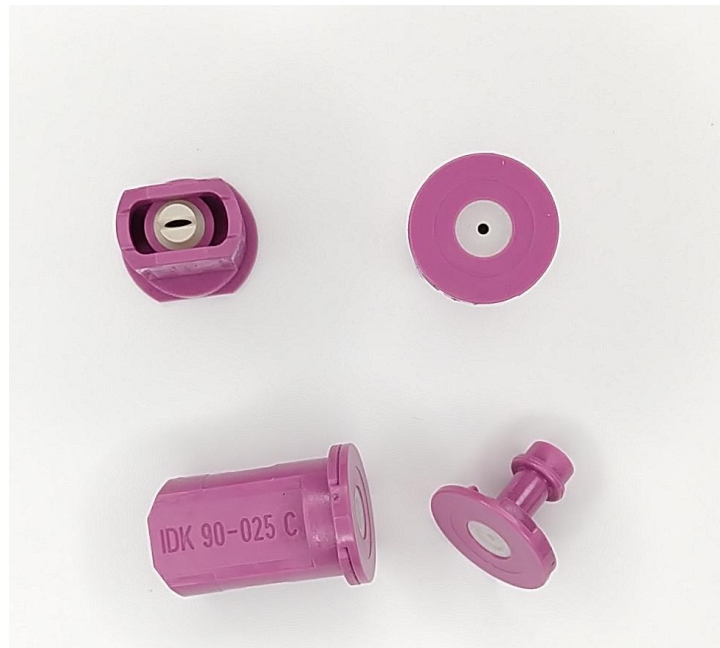




TEST REPORT

of the
Julius Kühn-Institut
Federal Research Institute
for Cultivated Plants, Braunschweig



**Injector - Flatfan nozzle Lechler IDK 90-025 C
(ceramics, plastic-coated, lilac)**

**Approved for spraying field crops
with 250 mm nozzle spacing**

Applicant and Manufacturer
Lechler GmbH
Präzisionsdüsen - Tropfenabscheider
Ulmer Strasse 128
72555 Metzingen

**Approved on
21. January 2022**

Assessment

The injector flatfan nozzle Lechler IDK 90-025 C (ceramics, plastic-coated, lilac) was tested without accessories. The nozzle is suitable for spraying field crops, provided that the following technical requirements are fulfilled:

1. Installation in a spray boom with a sufficient and a steady amount of liquid flow,
2. 250 mm nozzle spacing,
3. 40 cm between nozzles and spray target (consistency of evenness of cross distribution proved satisfactory at a distance range from 30 cm to 50 cm),
4. Spray pressure – measured in front of the nozzle – between 1.5 and 8.0 bar; liquid volume flow per nozzle as stated in table below.

Suitable precautions should be taken to assure that the nozzles do not get blocked up or drip when in use. The nozzles have a key width of 8 mm. The colour coding of the nozzle comply with standard ISO 10625.

Pressure (bar)	Liquid flow volume without accessories (l/min)	Max. deviation of single nozzle flow from the dosage tables	Evenness of cross distribution at (cm) 30 / 40 / 50 (Vk %)	Droplet spectrum (BCPC-Standard)
1.5	0.70	-4.08 %	4.6 / 3.8 / 5.6	extreme coarse
2.0	0.80	-	- / - / -	extreme coarse
3.0	0.99	-4.48 %	- / 6.0 / -	very coarse
4.0	1.14	-	2.8 / 5.9 / 2.7	coarse
5.0	1.27	-4.98 %	- / 5.0 / -	coarse
6.0	1.39	-	- / 3.9 / -	medium
8.0	1.61	-4.96 %	- / 3.1 / -	medium

Loss reducing properties

Included in the list „Loss reducing equipment“ (as of 11 May 2022)

Drift reducing classification	Type of equipment and drift reducing parts	Regulations for use
95 %	Fieldsprayers with a distance from nozzle to nozzle of 25 cm with Lechler IDK 90-025 C	First 20 m from field edge spraying with max. 2.0 bar, nozzle height above target 40 cm.

Field test

The nozzles were used on a wear test bench in 2021.

Basics for testing

The tests were carried out on basis of the Regulations for Testing Plant Protection Equipment (JKI-Guideline 2-1.1:2013) and of ISO 5682-1:1999. The requirements of ISO 16119-2:2013 and of JKI-Guideline 1-2.1:2013 were fulfilled.

Field testing:

Landwirtschaftskammer
Nordrhein-Westfalen
Pflanzenschutzdienst, Ref. 62
Nevinghoff 40
48147 Münster

Technical testing:

Institut für Anwendungstechnik im
Pflanzenschutz des
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