



TEST REPORT

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



Offcenter flatfan nozzle Lechler IS 80-04 (plastic, red) in combination with Lechler ID 120-04 POM or ID 120-04 C or ID-120-04 POM or ID-120-04 C or IDTA 120-04 C

Approved for spraying field crops used at the end of the spray boom

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

Approved on
12 January 2006
Extension of approval
on 6 January 2016

Assessment

The offcenter flatfan nozzle Lechler IS 80-04 POM (plastic, red) was tested without accessories. The nozzle is suitable for spraying field crops, provided that the following technical requirements are fulfilled:

1. Usage of the nozzle at the end of the spray boom in combination with Lechler ID 120-04 POM or ID 120-04 C or ID-120-04 POM or ID-120-04 C or IDTA 120-04 C,
2. Installation in a spray boom with a sufficient and a steady amount of liquid flow,
3. 500 mm nozzle spacing,
4. 50 cm between nozzles and spray target (consistency of evenness of cross distribution proved satisfactory at a distance range from 40 cm to 60 cm),
5. Spray pressure – measured in front of the nozzle – between 2.0 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 10 mm. The dimensions of the nozzle tip comply with standard ISO 8169. The colour coding does not comply with standard ISO 10625.

Pressure (bar)	Liquid flow volume without accessories (l/min)	Droplet spectrum (BCPC-Standard)
2.0	1.11	very coarse
2.5	1.24	
3.0	1.36	very coarse
3.5	1.47	
4.0	1.57	very coarse
4.5	1.67	
5.0	1.76	very coarse
5.5	1.84	
6.0	1.92	coarse
6.5	2.00	
7.0	2.08	coarse
7.5	2.15	
8.0	2.22	coarse

Loss reducing properties

Included in the list „Loss reducing equipment“ (as of 15 April 2016)

Drift reducing classification	Type of equipment and drift reducing parts	Regulations for use
50 %	Fieldsprayers with Lechler ID 120-04 POM or ID 120-04 C in combination with Lechler IS 80-04 POM	First 20 m from field edge spraying with max. 5.0 bar, nozzle height above target 50 cm
50 %	Fieldsprayers with Lechler ID-120-04 POM or ID-120-04 C in combination with Lechler IS 80-04 POM	Nozzle height above target 50 cm, spraying with max. 8.0 bar
75 %	Fieldsprayers with Lechler ID 120-04 POM or Lechler ID 120-04 C in combination with Lechler IS 80-04 POM	First 20 m from field edge spraying with 3.0 bar, nozzle height above target 50 cm
75 %	Fieldsprayers with Lechler ID-120-04 POM or ID-120-04 C in combination with Lechler IS 80-04 POM	First 20 m from field edge spraying with max. 6.0 bar, nozzle height above target 50 cm
90 %	Fieldsprayers with Lechler ID-120-04 POM in combination with Lechler IS 80-04 POM	First 20 m from field edge spraying with max. 3.0 bar, nozzle height above target 50 cm
90 %	Fieldsprayers with Lechler ID-120-04 C in combination with Lechler IS 80-04 POM	First 20 m from field edge spraying with max. 2.5 bar, nozzle height above target 50 cm

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:

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Technical testing:

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