



## HARDI ISO F-110

### Standard FLATFAN nozzles

All-round FLATFAN nozzle. Recommended for all types of pesticide application where optimum coverage is demanded. This nozzle will give you excellent and uniform liquid distribution at boom heights from 35 to 70 cm (50 cm recommended to take care of uneven terrain or boom movements).

- ISO – flow, colour and outer dimensions
- Working pressure – 1.5 to 5 bar
- Recommended for TWIN sprayers
- SYNTAL – precision moulded thermoplastic
- CERAMIC – extremely high durability
- COLORTIPS – for safe and easy handling

|                                         | bar | l/min |   | 6                                      | 7  | 8  | 10 | 12 | 15 | 20 | 25 |
|-----------------------------------------|-----|-------|---|----------------------------------------|----|----|----|----|----|----|----|
| 0075-Pink                               | 1.5 | 0.21  | F | 42                                     | 36 | 32 | 25 | 21 | 17 | 13 | 10 |
|                                         | 2.0 | 0.24  | F | 49                                     | 42 | 37 | 29 | 24 | 20 | 15 | 12 |
|                                         | 2.5 | 0.27  | F | 55                                     | 47 | 41 | 33 | 27 | 22 | 16 | 13 |
|                                         | 3.0 | 0.30  | F | 60                                     | 51 | 45 | 36 | 30 | 24 | 18 | 14 |
|                                         | 4.0 | 0.35  | F | 69                                     | 59 | 52 | 42 | 35 | 28 | 21 | 17 |
|                                         | 5.0 | 0.39  | F | 77                                     | 66 | 58 | 46 | 39 | 31 | 23 | 19 |
| SYNTAL-CT ..... 371964 (12 pcs. 750634) |     |       |   | SYNTAL-S ..... 371963 (12 pcs. 750635) |    |    |    |    |    |    |    |

|                                         |     |      |   |                                        |    |    |    |    |    |    |    |
|-----------------------------------------|-----|------|---|----------------------------------------|----|----|----|----|----|----|----|
| 01-Orange                               | 1.5 | 0.28 | F | 57                                     | 48 | 42 | 34 | 28 | 23 | 17 | 14 |
|                                         | 2.0 | 0.33 | F | 65                                     | 56 | 49 | 39 | 33 | 26 | 20 | 16 |
|                                         | 2.5 | 0.37 | F | 73                                     | 63 | 55 | 44 | 37 | 29 | 22 | 18 |
|                                         | 3.0 | 0.40 | F | 80                                     | 69 | 60 | 48 | 40 | 32 | 24 | 19 |
|                                         | 4.0 | 0.46 | F | 92                                     | 79 | 69 | 55 | 46 | 37 | 28 | 22 |
|                                         | 5.0 | 0.52 | F | 103                                    | 89 | 77 | 62 | 52 | 41 | 31 | 25 |
| SYNTAL-CT ..... 371764 (12 pcs. 755627) |     |      |   | SYNTAL-S ..... 371706 (12 pcs. 755643) |    |    |    |    |    |    |    |

|                                         |     |      |   |                                        |     |     |    |    |    |    |    |
|-----------------------------------------|-----|------|---|----------------------------------------|-----|-----|----|----|----|----|----|
| 015-Green                               | 1.5 | 0.42 | M | 85                                     | 73  | 64  | 51 | 42 | 34 | 25 | 20 |
|                                         | 2.0 | 0.49 | F | 98                                     | 84  | 73  | 59 | 49 | 39 | 29 | 24 |
|                                         | 2.5 | 0.55 | F | 110                                    | 94  | 82  | 66 | 55 | 44 | 33 | 26 |
|                                         | 3.0 | 0.60 | F | 120                                    | 103 | 90  | 72 | 60 | 48 | 36 | 29 |
|                                         | 4.0 | 0.69 | F | 139                                    | 119 | 104 | 83 | 69 | 55 | 42 | 33 |
|                                         | 5.0 | 0.77 | F | 155                                    | 133 | 116 | 93 | 77 | 62 | 46 | 37 |
| SYNTAL-CT ..... 371765 (12 pcs. 755628) |     |      |   | SYNTAL-S ..... 371707 (12 pcs. 755646) |     |     |    |    |    |    |    |

|                                         |     |      |   |                         |     |     |     |     |    |    |    |
|-----------------------------------------|-----|------|---|-------------------------|-----|-----|-----|-----|----|----|----|
| 02-Yellow                               | 1.5 | 0.57 | M | 113                     | 97  | 85  | 68  | 57  | 45 | 34 | 27 |
|                                         | 2.0 | 0.65 | M | 131                     | 112 | 98  | 78  | 65  | 52 | 39 | 31 |
|                                         | 2.5 | 0.73 | F | 146                     | 125 | 110 | 88  | 73  | 58 | 44 | 35 |
|                                         | 3.0 | 0.80 | F | 160                     | 137 | 120 | 96  | 80  | 64 | 48 | 38 |
|                                         | 4.0 | 0.92 | F | 185                     | 158 | 139 | 111 | 92  | 74 | 55 | 44 |
|                                         | 5.0 | 1.03 | F | 207                     | 177 | 155 | 124 | 103 | 83 | 62 | 50 |
| SYNTAL-CT ..... 371766 (12 pcs. 755629) |     |      |   | CERAMIC-CT ..... 371773 |     |     |     |     |    |    |    |
| SYNTAL-S ..... 371708 (12 pcs. 755649)  |     |      |   | CERAMIC-S ..... 371739  |     |     |     |     |    |    |    |
| SYNTAL-S-TIP ..... 37223100             |     |      |   |                         |     |     |     |     |    |    |    |

|                                         |     |      |   |                             |     |     |     |     |     |    |    |
|-----------------------------------------|-----|------|---|-----------------------------|-----|-----|-----|-----|-----|----|----|
| 025-Lilac                               | 1.5 | 0.71 | M | 141                         | 121 | 106 | 85  | 71  | 57  | 42 | 34 |
|                                         | 2.0 | 0.82 | M | 163                         | 140 | 122 | 98  | 82  | 65  | 49 | 39 |
|                                         | 2.5 | 0.91 | M | 183                         | 156 | 137 | 110 | 91  | 73  | 55 | 44 |
|                                         | 3.0 | 1.00 | M | 200                         | 171 | 150 | 120 | 100 | 80  | 60 | 48 |
|                                         | 4.0 | 1.15 | F | 231                         | 198 | 173 | 139 | 115 | 92  | 69 | 55 |
|                                         | 5.0 | 1.29 | F | 258                         | 221 | 194 | 155 | 129 | 103 | 77 | 62 |
| SYNTAL-CT ..... 371950 (12 pcs. 750626) |     |      |   | SYNTAL-S-TIP ..... 37223200 |     |     |     |     |     |    |    |
| SYNTAL-S ..... 371946 (12 pcs. 750628)  |     |      |   |                             |     |     |     |     |     |    |    |

|                                         | bar | l/min |   | 6                           | 7   | 8   | 10  | 12  | 15  | 20 | 25 |
|-----------------------------------------|-----|-------|---|-----------------------------|-----|-----|-----|-----|-----|----|----|
| 03-Blue                                 | 1.5 | 0.85  | M | 170                         | 145 | 127 | 102 | 85  | 68  | 51 | 41 |
|                                         | 2.0 | 0.98  | M | 196                         | 168 | 147 | 118 | 98  | 78  | 59 | 47 |
|                                         | 2.5 | 1.10  | M | 219                         | 188 | 164 | 131 | 110 | 88  | 66 | 53 |
|                                         | 3.0 | 1.20  | M | 240                         | 206 | 180 | 144 | 120 | 96  | 72 | 58 |
|                                         | 4.0 | 1.39  | M | 277                         | 238 | 208 | 166 | 139 | 111 | 83 | 67 |
|                                         | 5.0 | 1.55  | M | 310                         | 266 | 232 | 186 | 155 | 124 | 93 | 74 |
| SYNTAL-CT ..... 371767 (12 pcs. 755630) |     |       |   | SYNTAL-S-TIP ..... 37223300 |     |     |     |     |     |    |    |
| SYNTAL-S ..... 371709 (12 pcs. 755652)  |     |       |   | CERAMIC-CT ..... 371774     |     |     |     |     |     |    |    |

|                                         |     |      |   |                             |     |     |     |     |     |     |    |
|-----------------------------------------|-----|------|---|-----------------------------|-----|-----|-----|-----|-----|-----|----|
| 04-Red                                  | 1.5 | 1.13 | M | 226                         | 194 | 170 | 136 | 113 | 91  | 68  | 54 |
|                                         | 2.0 | 1.31 | M | 261                         | 224 | 196 | 157 | 131 | 105 | 78  | 63 |
|                                         | 2.5 | 1.46 | M | 292                         | 250 | 219 | 175 | 146 | 117 | 88  | 70 |
|                                         | 3.0 | 1.60 | M | 320                         | 274 | 240 | 192 | 160 | 128 | 96  | 77 |
|                                         | 4.0 | 1.85 | M | 370                         | 317 | 277 | 222 | 185 | 148 | 111 | 89 |
|                                         | 5.0 | 2.07 | M | 413                         | 354 | 310 | 248 | 207 | 165 | 124 | 99 |
| SYNTAL-CT ..... 371768 (12 pcs. 755631) |     |      |   | SYNTAL-S-TIP ..... 37223400 |     |     |     |     |     |     |    |
| SYNTAL-S ..... 371710 (12 pcs. 755655)  |     |      |   | CERAMIC-CT ..... 371775     |     |     |     |     |     |     |    |

|                                         |     |      |   |                             |     |     |     |     |     |     |     |
|-----------------------------------------|-----|------|---|-----------------------------|-----|-----|-----|-----|-----|-----|-----|
| 05-Brown                                | 1.5 | 1.41 | C | 283                         | 242 | 212 | 170 | 141 | 113 | 85  | 68  |
|                                         | 2.0 | 1.63 | C | 327                         | 280 | 245 | 196 | 163 | 131 | 98  | 78  |
|                                         | 2.5 | 1.83 | M | 365                         | 313 | 274 | 219 | 183 | 146 | 110 | 88  |
|                                         | 3.0 | 2.00 | M | 400                         | 343 | 300 | 240 | 200 | 160 | 120 | 96  |
|                                         | 4.0 | 2.31 | M | 462                         | 396 | 346 | 277 | 231 | 185 | 139 | 111 |
|                                         | 5.0 | 2.58 | M | 516                         | 443 | 387 | 310 | 258 | 207 | 155 | 124 |
| SYNTAL-CT ..... 371769 (12 pcs. 755632) |     |      |   | SYNTAL-S-TIP ..... 37223500 |     |     |     |     |     |     |     |
| SYNTAL-S ..... 371711 (12 pcs. 755658)  |     |      |   | CERAMIC-S ..... 371742      |     |     |     |     |     |     |     |

|                                         |     |      |   |                             |     |     |     |     |     |     |     |
|-----------------------------------------|-----|------|---|-----------------------------|-----|-----|-----|-----|-----|-----|-----|
| 06-Grey                                 | 1.5 | 1.70 | C | 339                         | 291 | 255 | 204 | 170 | 136 | 102 | 81  |
|                                         | 2.0 | 1.96 | C | 392                         | 336 | 294 | 235 | 196 | 157 | 118 | 94  |
|                                         | 2.5 | 2.19 | C | 438                         | 376 | 329 | 263 | 219 | 175 | 131 | 105 |
|                                         | 3.0 | 2.40 | C | 480                         | 411 | 360 | 288 | 240 | 192 | 144 | 115 |
|                                         | 4.0 | 2.77 | C | 554                         | 475 | 416 | 333 | 277 | 222 | 166 | 133 |
|                                         | 5.0 | 3.10 | C | 620                         | 531 | 465 | 372 | 310 | 248 | 186 | 149 |
| SYNTAL-CT ..... 371770 (12 pcs. 755633) |     |      |   | SYNTAL-S-TIP ..... 37223600 |     |     |     |     |     |     |     |
| SYNTAL-S ..... 371712 (12 pcs. 755661)  |     |      |   | CERAMIC-S ..... 371743      |     |     |     |     |     |     |     |

|                                         |     |      |    |                             |     |     |     |     |     |     |     |
|-----------------------------------------|-----|------|----|-----------------------------|-----|-----|-----|-----|-----|-----|-----|
| 08-White                                | 1.5 | 2.26 | VC | 453                         | 388 | 339 | 272 | 226 | 181 | 136 | 109 |
|                                         | 2.0 | 2.61 | C  | 523                         | 448 | 392 | 314 | 261 | 209 | 157 | 125 |
|                                         | 2.5 | 2.92 | C  | 584                         | 501 | 438 | 351 | 292 | 234 | 175 | 140 |
|                                         | 3.0 | 3.20 | C  | 640                         | 549 | 480 | 384 | 320 | 256 | 192 | 154 |
|                                         | 4.0 | 3.70 | C  | 739                         | 633 | 554 | 443 | 370 | 296 | 222 | 177 |
|                                         | 5.0 | 4.13 | C  | 826                         | 708 | 620 | 496 | 413 | 330 | 248 | 198 |
| SYNTAL-CT ..... 371771 (12 pcs. 755634) |     |      |    | SYNTAL-S-TIP ..... 37223700 |     |     |     |     |     |     |     |
| SYNTAL-S ..... 371713 (12 pcs. 755664)  |     |      |    |                             |     |     |     |     |     |     |     |

|                                         |     |      |    |                             |     |     |     |     |     |     |     |
|-----------------------------------------|-----|------|----|-----------------------------|-----|-----|-----|-----|-----|-----|-----|
| 10-Light blue                           | 1.5 | 2.83 | VC | 566                         | 485 | 424 | 339 | 283 | 226 | 170 | 136 |
|                                         | 2.0 | 3.27 | VC | 653                         | 560 | 490 | 392 | 327 | 261 | 196 | 157 |
|                                         | 2.5 | 3.65 | VC | 730                         | 626 | 548 | 438 | 365 | 292 | 219 | 175 |
|                                         | 3.0 | 4.00 | VC | 800                         | 686 | 600 | 480 | 400 | 320 | 240 | 192 |
|                                         | 4.0 | 4.62 | C  | 924                         | 792 | 693 | 554 | 462 | 370 | 277 | 222 |
|                                         | 5.0 | 5.16 | C  | 1033                        | 885 | 775 | 620 | 516 | 413 | 310 | 248 |
| SYNTAL-CT ..... 371970 (12 pcs. 750636) |     |      |    | SYNTAL-S-TIP ..... 37223800 |     |     |     |     |     |     |     |
| SYNTAL-S ..... 371966 (12 pcs. 750638)  |     |      |    |                             |     |     |     |     |     |     |     |

Spray quality: Ultra Coarse (UC) Extremely Coarse (XC) Very Coarse (VC) Coarse (C) Medium (M) Fine (F) Very Fine (VF)

Our SYNTAL nozzles are available in three different categories, Single (S), Color-Tip (CT) and S-TIP. See page 7 for more information.