



## TECHNICAL DATA SHEET

Standard grade

|                   |                    |                  |            |
|-------------------|--------------------|------------------|------------|
| Product name      | (Z)-11-Hexadecenal | Product code     | EP00027    |
| CAS No.           | 53939-28-9         | Pheromone code   | 11Z-16:Ald |
| Molecular formula | C16H30O            | Molecular weight | 238.41     |

### Specification

| Property              | Specification                 | Method                                  |
|-----------------------|-------------------------------|-----------------------------------------|
| Appearance            | Clear, colourless oily liquid | Visual                                  |
| Chemical purity       | ≥ 98.0 %                      | GC-FID (PEG)                            |
| Isomeric purity (11Z) | ≥ 93.0 %                      | GC-FID (cyanopropyl), isomer-normalised |

### Physical properties (literature reference)

|         |                         |             |       |
|---------|-------------------------|-------------|-------|
| Density | 0.906 g/cm <sup>3</sup> | Flash point | 61 °C |
|---------|-------------------------|-------------|-------|

### Storage and handling

|                    |                                                                                                  |               |                       |
|--------------------|--------------------------------------------------------------------------------------------------|---------------|-----------------------|
| Storage conditions | 2–8 °C (or –20 °C), protected from light, under nitrogen, container filled to minimise headspace | Retest period | 12 months             |
| Packaging          | 1 kg; 25 kg                                                                                      | Safety        | See Safety Data Sheet |

### Application (literature reference)

|                           |                                                                                                                                                               |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pheromone type            | Sex pheromone                                                                                                                                                 |
| Target species            | Plutella xylostella; Helicoverpa armigera (cotton bollworm); Mythimna separata; Orthaga achatina                                                              |
| Order / family            | Lepidoptera: Crambidae                                                                                                                                        |
| Crops                     | Brassica nigra; Mangifera indica (mango); camphor tree                                                                                                        |
| Reported blend components | (Z)-11-hexadecenyl acetate (Z11-16:OAc); (Z)-11-hexadecenol (Z11-16:OH); (Z3,Z6,Z9,Z12,Z15)-tricosapentaene (Z3,Z6,Z9,Z12,Z15-23:H); (3Z,6Z,9Z)-tricosatriene |
| Key reference             | doi:10.1038/s41598-021-93052-8;<br>doi:10.1016/j.ibmb.2021.103554                                                                                             |