



## CERTIFICATE OF ANALYSIS

### Product

|              |                 |                        |             |
|--------------|-----------------|------------------------|-------------|
| Product name | (Z)-4-Undecenal | Product code           | EP00168     |
| CAS No.      | 68820-32-6      | Pheromone code         | 4Z-11:Ald   |
| Batch No.    | EP260628        | Batch size / packaging | 1 kg; 25 kg |

### Specification and results

| Test                            | Specification                                                             | Result                   | Method                           |
|---------------------------------|---------------------------------------------------------------------------|--------------------------|----------------------------------|
| Appearance                      | Clear, colourless to pale yellow liquid; free from visible foreign matter | Clear, colourless liquid | Visual; record temperature       |
| Chemical group purity (GC area) | ≥ 95.0 %; sum of compound stereoisomers                                   | 96.5 %                   | GC-FID                           |
| Target isomer fraction (4Z)     | Report distribution                                                       | 95.9 %                   | GC separation; isomer-normalised |

GC area %: stereoisomer peaks of the compound / total organic peaks, excluding solvent and internal standard; isomer fraction normalised within the group.

### Storage and dates

|                     |                                                                                                  |                  |            |
|---------------------|--------------------------------------------------------------------------------------------------|------------------|------------|
| Storage conditions  | 2–8 °C (or –20 °C), protected from light, under nitrogen, container filled to minimise headspace |                  |            |
| Date of manufacture | 2026-06-23                                                                                       | Date of analysis | 2026-07-01 |

### Signature

| Analysed by | Approved by   | Date       |
|-------------|---------------|------------|
| Wang Zubing | Zhong Wenjing | 2026-07-01 |