

# Certificate of Analysis

## Reference Material & Standard

|                            |                   |                          |                                           |
|----------------------------|-------------------|--------------------------|-------------------------------------------|
| <b>Product Name:</b>       | Phthalate MIX 10  | <b>Catalogue Number:</b> | MPAE111842-DI                             |
| <b>Appearance:</b>         | Colourless Liquid | <b>Lot Number:</b>       | 0515-RE-0139                              |
| <b>Solvent:</b>            | Dichloromethane   | <b>Storage:</b>          | -20°C±5°C Protected from light and Sealed |
| <b>Expiry Date:</b>        | Sep 17, 2027      |                          |                                           |
| <b>Chemical Structure:</b> | N/A               |                          |                                           |

| NO. | Component                          | CAS No.    | Certified Concentration Value (µg/mL) | Uncertainty (µg/mL) |
|-----|------------------------------------|------------|---------------------------------------|---------------------|
| 1   | Phthalic Acid, Bis-Isononyl Ester  | 68515-48-0 | 4997.2                                | 150                 |
| 2   | Phthalic Acid, Bis-Butyl Ester     | 84-74-2    | 1004.5                                | 30                  |
| 3   | Diamyl Phthalate                   | 131-18-0   | 1004.8                                | 30                  |
| 4   | Diethyl Phthalate                  | 84-75-3    | 1000.5                                | 30                  |
| 5   | Benzyl butyl phthalate             | 85-68-7    | 1002.3                                | 30                  |
| 6   | Bis(2-ethylhexyl) phthalate        | 117-81-7   | 1000.6                                | 30                  |
| 7   | Dicyclohexyl Phthalate             | 84-61-7    | 1000.2                                | 30                  |
| 8   | Phthalic Acid, Bis-Iso-Butyl Ester | 84-69-5    | 1003.7                                | 30                  |
| 9   | Di-N-Octyl Phthalate               | 117-84-0   | 999.4                                 | 30                  |
| 10  | Di-Isodecyl Phthalate              | 68515-49-1 | 5004.9                                | 150                 |

## Comment:

The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

## Signature:

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Reviewed by:

*Xenia*

Aproved by General Manager:

*David*

Date: Jan 18, 2022

Date: May 17, 2023

Date: May 17, 2023

