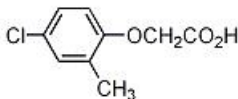


## TECHNICAL DATA SHEET OF

### MCPA 96% TC

| Chemistry identity               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Common name                      | MCPA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| IUPAC name                       | (4-chloro-2-methylphenoxy)acetic acid; 4-chloro-o-tolyloxyacetic acid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CAS No                           | 94-74-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Molecular structure              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Physical and chemical properties |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Appearance                       | Off-white powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Content                          | 96% min (w/w)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Water                            | 0.3% max (w/w)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Solubility                       | In water 26.2 (pH 5), 293.9 (pH 7), 320.1 (pH 9) (all in g/l, 25 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Mammalian toxicity               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Acute oral                       | LD <sub>50</sub> >1000 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Acute dermal                     | LD <sub>50</sub> for rats >4000 mg/kg.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Acute inhalation                 | LC <sub>50</sub> (4 h) for rats > 5.0 mg/L                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Environment fate                 | <p><b>Animals</b> In rats, following oral administration, MCPA is rapidly absorbed and excreted almost exclusively in the urine, with only a small proportion in the faeces. Only moderate metabolism occurs, and there is only a small amount of conjugate formation. <b>Plants</b> In winter wheat, MCPA is hydroxylated at the methyl group with formation of 2-hydroxymethyl-4-chlorophenoxyacetic acid. This may be further degraded to the benzoic acid, prior to ring opening. <b>Soil/Environment</b> In soil, degraded to 4-chloro-2-methylphenol, followed by ring hydroxylation and ring opening. DT50 &lt;7 d after initial lag phase.</p> |
| Handling and storage             | <p><b>Handling</b> Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Avoid release to the environment. Dispose of contents/ container to an approved waste disposal plant.</p> <p><b>Storage</b> Do not store with seed, fertilisers or foodstuffs. Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Do not store for prolonged periods in direct sunlight.</p>                                                                                                                                                    |
| Package                          | 25kg/drum or customized package                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |