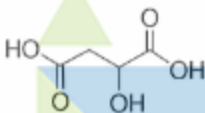


## Technical Data Sheet

|                    |  |
|--------------------|--|
| Product Name       | Malic Acid FUSO  |
| Chemical Name      | DL-Malic Acid  |
| Synonyms           | Hydroxy butanedioic Acid   |
| Formula            | C <sub>4</sub> H <sub>6</sub> O <sub>5</sub>   |
| Structural Formula |   |
| Molecular Weight   | 134.1  |
| CAS No             | 6915-15-7  |
| ENIECE             | 230-022-8  |
| Specification      | <p>Appearance : White or nearly white, crystalline powder or granule.</p> <p>Identification : To pass test</p> <p>Assay : 99.0 - 100.5%</p> <p>Residue on Ignition(JSFA) : NMT 0.05%</p> <p>Water-Insoluble Matter : NMT 0.1%</p> <p>Specific Rotation <math>[\alpha]_D^{25}</math> : - 0.10 - + 0.10°</p> <p>Fumaric Acid : NMT 1.0%</p> <p>Maleic Acid : NMT 0.05%</p> <p>Arsenic (as As<sub>2</sub>O<sub>3</sub>) : NMT 2 mg/kg</p> <p>Heavy Metals (as Pb) : NMT 5 mg/kg</p> <p>Lead : NMT 2 mg/kg</p> <p>Copper : NMT 50 mg/kg</p> <p>Zinc : NMT. 25mg/kg</p> <p>Mercury : NMT 1 mg/kg</p> <p>Sulphated Ash(FCC) : NMT 0.1%</p> <p>Loss on Drying : NMT 0.3%</p> <p>Melting Point : 127 - 132°C</p> |