

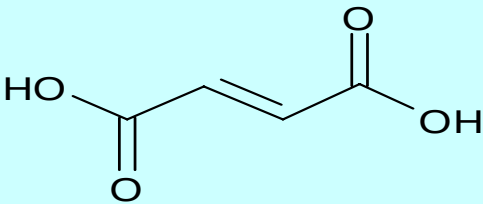


**SDFCL**  
s d fine-chem limited

Quality Control Dept.

Product Specification



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                           |                                                                               |                                                                                               |
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| E Control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | QC2\DATAD\ID\PS\38435XPS.xls                                                              |                                                                               |                                                                                               |
| PRODUCT CODE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 38435                                                                                     |                                                                               |                                                                                               |
| PRODUCT NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | FUMARIC ACID LR                                                                           |                                                                               |                                                                                               |
| SYNONYMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | --                                                                                        |                                                                               |                                                                                               |
| C.I. NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | --                                                                                        |                                                                               |                                                                                               |
| CASR NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (110-17-8)                                                                                |                                                                               |                                                                                               |
| ATOMIC OR MOLECULAR FORMULA                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | C <sub>4</sub> H <sub>4</sub> O <sub>4</sub>                                              |                                                                               |                                                                                               |
| ATOMIC OR MOLECULAR WEIGHT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 116.07                                                                                    |                                                                               |                                                                                               |
| PROPERTIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Almost insoluble in olive oil, chloroform, carbon tetrachloride, benzene, liquid ammonia. |                                                                               |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                           |                                                                               |                                                                                               |
| PARAMETER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | LIMIT                                                                                     |                                                                               |                                                                                               |
| Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | A white crystalline powder.                                                               |                                                                               |                                                                                               |
| Solubility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 5% solution in methanol is clear and colourless.                                          |                                                                               |                                                                                               |
| Minimum Assay (Acidimetric)                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 99.0%                                                                                     |                                                                               |                                                                                               |
| Melting Point (with decomposition)                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | About 290°C                                                                               |                                                                               |                                                                                               |
| <b>MAXIMUM LIMIT OF IMPURITIES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                           |                                                                               |                                                                                               |
| --                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | --                                                                                        |                                                                               |                                                                                               |
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| <b>Note(s) : Assay (if applicable) method mentioned.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                           |                                                                               |                                                                                               |
| <b>WARNING</b><br><b>Hazard statements:</b> Causes mild skin irritation Causes serious eye irritation<br><b>Precautionary statements</b><br><b>Prevention :</b> Wash hands thoroughly after handling.<br><b>Response:</b> Wear eye/face protection.If eye irritation persists, get medical advice/attention.IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If skin irritation occurs, seek medical advice/attention. |                                                                                           | IMDG Code : ---<br>UN No. : --<br>IATA : ---                                  |                                                                                               |
| <b>Disposal:</b> The chemical should be mixed with combustible solvent and burnt in a chemical incinerator equipped with burner and scrubber.                                                                                                                                                                                                                                                                                                                                                             |                                                                                           |                                                                               |                                                                                               |
| <b>Hazard Pictogram(s) :</b><br><div style="text-align: center;"><br/><b>Skin irritation</b></div>                                                                                                                                                                                                                                                                                                                     |                                                                                           |                                                                               |                                                                                               |
| Prepared By :<br>Name/Dept. : Officer (Q.A.)<br>Sign. :<br>Date : 07.01.2015                                                                                                                                                                                                                                                                                                                                                                                                                              | Checked By:<br>Name/Dept.:Incharge(Q.A.)<br>Sign. :<br>Date : 08.01.2015                  | Approved By:<br>Name/Dept. : Incharge (Tech.)<br>Sign. :<br>Date : 16.01.2015 | Issue Date : 01.07.2002<br>Revision No. : 03<br>Revision dt. : 16.01.2015.<br>AMEND NO. :1662 |