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|---|--|-----------|----------|
| <br><b>AJINOMOTO EUROLYSINE S.A.S.</b> | <b>Technical data sheet</b><br><i>L-Tryptophan 98 % Feed Grade</i> | Reference | SPF.0011 |
|   |  | Revision  | D        |
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L-Tryptophan 98 % Feed Grade is produced by fermentation.

**This product is intended only for animals and should not be used in human products or human consumption.**

### Chemical description

|                  |                      |
|------------------|----------------------|
| Chemical formula | $C_{11}H_{12}N_2O_2$ |
| Molecular weight | 204.23               |
| Isomer           | L (Laevo-rotatory)   |

### Commercial guarantee

|                                       |    |         |
|---------------------------------------|----|---------|
| L-Tryptophan (%) - HPLC analysis      | 98 | Minimum |
| Moisture (%) - 105°C for 4 hours      | 1  | Maximum |
| Purity (%) - Tryptophan on dry matter | 98 | Minimum |

### Regulatory position

L-Tryptophan, technically pure (L-Tryptophan 98 % Feed Grade) is in the scope of Regulation (EC) 1831/2003 of 22/09/2003 on additives for use in animal nutrition (OJ EU n° L 268 of 18/10/2003), category: “nutritional additives”, additive group: “amino acids, their salts and analogues” and is approved for use in all animal species.

### Nutritional values

|                                 |              |
|---------------------------------|--------------|
| Dry matter (%)                  | 99.0         |
| Tryptophan content (%)          | 98.0         |
| Digestibility coefficient (%)   | 100          |
| Crude Protein (N x 6,25, %)     | 84.0         |
| ME poultry, kcal.kg-1 (MJ.kg-1) | 5850 (24.28) |
| DE pig, kcal.kg-1 (MJ.kg-1)     | 6510 (27.24) |
| ME pig, kcal.kg-1 (MJ.kg-1)     | 6120 (25.61) |
| NE pig, kcal.kg-1 (MJ.kg-1)     | 4730 (19.79) |

### Physical description

Whitish to yellowish powder.

### Physical characteristics

|   |                   |
|---|-------------------|
| pH (0.5g in 100 ml of H <sub>2</sub> O) | 4.5 to 7          |
| Bulk density (kg/l)                     | 0.2 to 0.3        |
| Solubility in water at 25 °C            | 1.136g/100g water |

### Packaging

10 kg bags on shrink wrapped pallets, “Big bags”.

### Stability

Original 10kg bags unopened: the product is stable for at least 3 years if stored under recommended conditions.  
Original “Big bags” unopened: the product is stable for at least 1 year if stored under recommended conditions.

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