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SPECIFICATION SHEET Vitamin K2 (20) (MK-4)

Item Code: 021K2P

Country of Origin: China

Updated: June 2012

| TEST ITEMS | SPECIFICATIONS | TEST METHODS |
|-----------------------------------|---|-------------------|
| Appearance | Yellow crystals or crystalline powder, odorless and tasteless | Visual |
| Identification (Visual, HPLC, IR) | Certified by Ethanol + Sodium Borohydride test; by HPLC; by IR | Visual, HPLC & IR |
| Solubility (Visual) | Soluble in chloroform, benzene acetone, ethyl ether, petroleum ether; slightly soluble in methanol, ethanol; insoluble in water | Visual |
| Melting Point | 34.0°C - 38.0°C | USP<741> |
| Water | ≤ 0.3% by KF | USP |
| Heavy Metals | ≤ 10 ppm | AA |
| Arsenic | ≤ 1 ppm | AA |
| Residue on Ignition | ≤ 0.05% | USP<281> |
| Related substance | ≤ 1.0% | JP |
| Assay (on dry basis) | ≥ 98.0% (as C ₃₁ H ₄₀ O ₂) | HPLC |

Microbiology:

| | | |
|---------------------------|--------------|----|
| Total aerobic plate count | ≤1,000 cfu/g | CP |
| Yeast & Mold | ≤100 cfu/g | CP |
| Salmonella | Negative | CP |
| E. coli | Negative | CP |
| Staphylococcus aureus | Negative | CP |

Shelf Life: 2 years

Packing: In tins of 1 kg

- Kosher certified

Gayathri Vasudevan
Manager, Quality Assurance & Regulatory