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| **Quality Tests RA-CA Comparison Table** | | | | | |
| **Tests** | | | **Specifications** | **Reference Aspirin (RA)** | **Crude Aspirin (CA)** |
| 1. Appearance | | | White or almost white, crystalline powder or colorless crystals. |  |  |
| 1. Solubility | | | Slightly soluble in water, freely soluble in ethanol (96 percent). |  |  |
| 1. Melting point | | | About 143 ºC (Instantaneous Method) |  |  |
| 1. Identification | | A:  IR absorption spectrum | IR absorption spectrum |  |  |
| B:  Melting point of precipitate | 156 º to 161 º C |  |  |
| C:  Color test | The color becomes blue. |  |  |
| D:  Reaction of Salicylates | The solution gives reaction (a) of Salicylates. |  |  |
| 1. Appearance of solution | | | The solution is clear and colorless. |  |  |
| 1. Related Substances (%): | Impurity A – 4-Hydroxybenzoic acid | | NMT 0.15 |  |  |
| Impurity B – 4-Hydroxyisophthalic acid: | | NMT 0.15 |  |  |
| Impurity C – Salicylic acid: | | NMT 0.15 |  |  |
| Impurity D – Acetylsalicylsalicylic acid: | | NMT 0.15 |  |  |
| Impurity E – Salicylsalicylic acid: | | NMT 0.15 |  |  |
| Impurity F – Acetylsalicylic anhydride: | | NMT 0.15 |  |  |
| Unspecified Impurity: | | NMT 0.05 |  |  |
| Total Impurities: | | NMT 0.25 |  |  |
| 1. Heavy metals (ppm): | | | Maximum 20 |  |  |
| 1. Loss on drying (%, w/w): (Determined on 1.000g by drying in vacuo) | | | Maximum 0.5 |  |  |
| 1. Sulphated Ash (%, w/w, determined on 1.0g): | | | Maximum 0.1 |  |  |
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