



## Arm & Hammer™ Sodium Bicarbonate Compacted

|                             |             |  |
|-----------------------------|-------------|--|
| Reviewed: February 16, 2024 | Test Method |  |
| Assay – dry basis           | USP         | Not less than 99.0% NaHCO <sub>3</sub> |

### Granulation (Ro-Tap)

| US Mesh                    | Fractional % |
|----------------------------|--------------|
| + (On) 8                   | ≤ 15         |
| - (Through) 30 / + (on) 40 | ≤ 10         |
| - Through 40 (Pan)         | ≤ 3          |

### General Properties (Not Specifications)

|                             |  |
|-----------------------------|--|
| Empirical Formula           | NaHCO <sub>3</sub>   |
| CAS Number                  | 144-55-8   |
| Other Names                 | Bicarbonate of Soda<br>Sodium Hydrogen Carbonate<br>Baking Soda  |
| Chemical Abstract Name      | Carbonic acid monosodium salt  |
| E Number                    | E-500(ii)  |
| Appearance                  | White crystalline powder   |
| Taste                       | Slightly alkaline  |
| Molecular Weight            | 84.01  |
| Thermal Decomposition       | Decomposes without melting into Na <sub>2</sub> CO <sub>3</sub> , H <sub>2</sub> O and CO <sub>2</sub> . |
| Crystal Density             | 137.3 lb /ft <sup>3</sup> , 2.2 g / cc   |
| Bulk Density                | 63 lb/ft <sup>3</sup> , 1.009 g/cc   |
| BTU / lb at 72°F            | 0.249  |
| Solubility in water at 77°F | Approximately 9.5%   |
| Solubility in Alcohol       | Insoluble  |
| Alkali Equivalent           | 1 lb NaHCO <sub>3</sub> = 0.369 lb Na <sub>2</sub> O   |
| Acid Equivalent             | 1 lb NaHCO <sub>3</sub> = 0.435 lb HCl   |
| Carbon Dioxide Equivalent   | 1 lb NaHCO <sub>3</sub> = 0.524 lb CO <sub>2</sub>   |
| pH 1% aqueous soln at 77°F  | Approximately 8.3.   |