



## Arm & Hammer™ Sodium Bicarbonate Treated No. 1 Powdered with Tricalcium Phosphate Added (Grade 1 TFF)

Effective: May 1, 2018	Test Method	USP	FCC
Description	-	Sodium Bicarbonate contains not less than 99.0 percent and not more than 100.5 percent of NaHCO <sub>3</sub> calculated on the dried basis.	A white crystalline powder. It is stable in dry air, but slowly decomposes in moist air. Its solutions, when freshly prepared with cold water, without shaking, are alkaline to litmus. The alkalinity increases as the solutions stand, are agitated or are heated.
Assay – dry basis	USP	Not less than 99.0% and not more than 100.5% of NaHCO <sub>3</sub>	Not less than 99% NaHCO <sub>3</sub> after drying
Identification	USP <191>	Meets the requirements of the tests for sodium and bicarbonate.	A 1 in 10 solution gives positive tests for sodium and for bicarbonate.
Insoluble Substances	USP	Dissolve 1 g in 20 ml of water; the resulting solution is complete and clear.	Passes test
Normal Carbonate	USP	Meets test.	-
Chloride	USP <221>	Not more than 0.015%	-
Limit of Sulfur Compounds	USP	Not more than 0.015%	-
Elemental Impurities	ICP		-
Cadmium		Not more than 0.5 µg/g	-
Lead		Not more than 0.5 µg/g	Not more than 2 mg/Kg
Arsenic		Not more than 1.5 µg/g	-
Mercury		Not more than 1 µg/g	-
Limit of Ammonia	NA – See remarks	Not more than 20 ppm	-
Loss on Drying	USP <731>	Not more than 0.25%	Not more than 0.25% by weight
Non-USP Requirement			
Tricalcium Phosphate	C&D	0.2 – 0.5%	
<p>Ammonia is not used in the manufacturing process for Church &amp; Dwight Sodium bicarbonate. Controlled handling and storage of the product insure that ammonia will not exceed the USP limit. Absence of ammonia is confirmed on each lot via olfactory test.</p> <p>*Elemental Impurities (replaces Heavy Metals &lt;231&gt;)Limits based on USP &lt;232&gt; Table 2, Oral Drug Products. The remaining Table 2 elements are not known or expected impurities.</p> <p>Residual Solvents testing under USP &lt;467&gt; is not required as no solvents, and specifically no solvents of Class 1, 2, 3 or Table 4 as defined in &lt;467&gt;, are used in the manufacture or purification of Church &amp; Dwight Sodium Bicarbonate.</p>			

### Granulation (Powdered)

Sieve Size (USS)	Microns	Ro-Tap Cumulative % Retained	
		Minimum	Maximum
100	149	0	2
200	74	20	45
325	44	60	100