## Aluminum Hydroxide and Magnesium Hydroxide Tablets

| Bill of Materials | | | |
|---|---|---|---|
| Scale (mg/tablet) | Item | Material Name | Quantity/1000 Tablets (g) |
| 405.00 | 1 | Aluminum hydroxide gel (dried) | 405.00 |
| 100.00 | 2 | Magnesium hydroxide powder | 100.00 |
| 108.00 | 3 | Mannitol | 108.00 |
| 38.80 | 4 | Sorbitol powder | 38.80 |
| 2.50 | 5 | Saccharin sodium | 2.50 |
| 16.70 | 6 | Povidone (PVP K-30) | 16.70 |
| 7.00 | 7 | Magnesium stearate | 7.00 |
| 2.00 | 8 | Mint flavor (dry) | 2.00 |
| 299.00 | 9 | Purified water | 299.00 |

### Manufacturing Directions

1. Dissolve items 4 and 5 in 59.0 g of purified water by using stirrer.
2. Add item 6 while mixing until clear solution is obtained.
3. Add items 1 to 3 into mixer and mix for 5 minutes, with mixer and chopper at high speed.
4. Dilute concentrate binding solution with 240.0 g of purified water.
5. Add binding solution at a rate of 9 to 11 g/min to the dry powders in the mixer while mixing at low speed. Mix for 2 to 3 minutes. Scrape the sides, blade, and lid of the mixer. Mix and chop at low speed for an additional 2 to 3 minutes or until the granules stop flying around the chopper. Add extrapurified water, if required, and continue mixing until a satisfactory mass is obtained. Record extra quantity of purified water added.
6. Unload the wet mass into a clean aeromatic bowl for drying. Avoid big lump formation, as this leads to nonuniform drying.
7. Dry the wet mass in an Aeromatic fluid-bed dryer at 60°C for 120 minutes. After 30 minutes of drying, scrape the semidried granules to break the lumps for uniform drying. Check the LOD (limit: NMT 5.5%).
8. Pass the dried granules through 1.5-mm sieve, using granulator at medium speed. Collect in stainless steel drums. Set aside 7 to 9 g of granules for later step.
9. Load the rest of the granules into blender. Pass items 8 and 7 through a sifter, using a 250-μm sieve. Collect in a polyethylene bag.
10. Add about 7 to 9 g of granules and mix gently.
11. Load into blender and blend for 3 minutes.
12. Check temperature and humidity of the room before beginning compression (humidity limit: NMT 60%; temperature, 25 ± 1°C).
13. Compress the granules using a rotary tabletting machine. Compress into 680-mg tablets, using 12.7-mm, flat, beveled-edge punches.