
	GILES CHEMICAL ~ PREMIER MAGNESIA		
	Company Procedure		
	Title: Primo Water	Number: R12-PR-100-023	
	Owner: Mary Masters	Revision: 1	
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1.0 Purpose

- 1.1 This procedure describes the process of customer orders, ordering of raw materials, testing of raw materials, preparation of mixtures, lot numbering, packaging and shipping of Primo #1 and Primo mixture #2.

2.0 Scope

- 2.1 Prepare materials as the orders come in

3.0 Responsibility

- 3.1 Mary Masters – Training Coordinator

4.0 Safety Considerations

- 4.1 Steel toed shoes, hair net and safety glasses. Latex gloves are to be worn when preparing this mixture. Safety is a condition of employment. Employees are not authorized to work in an unsafe manner and are prohibited from harming the environment of the facility or community.



5.0 Materials/Equipment

- 5.1 N/A

6.0 Procedure

6.1 Raw Materials – The raw material present; Primo mixture #1 is Calcium Chloride Primo mixtures #2 are Magnesium Sulfate and Sodium Bicarbonate.

- 6.1.1 Raw materials are ordered by the Quality Technologist
- 6.1.2 Calcium Chloride and Sodium Bicarbonate are ordered through Mallinckrodt Baker in bulk shipments using account number 406094. Order Calcium Chloride (USP Grade) in 300 lb. drum and Sodium Bicarbonate (USP Grade) in two drums of 100 lbs. each.
- 6.1.3 Raw Materials are to be shipped to Giles Repackaging Facility (396 Smathers Street Waynesville, NC 28786).
- 6.1.4 When shipment of raw material arrives the Operator will take two samples of each material in small plastic bags and label the bags with the lot number on the barrel and date. One sample is kept as retain sample by the Quality Technologist and one sample to be sent to Chem-Bac Laboratories Charlotte, NC by the Quality Technologist for Bromide testing.
- 6.1.5 MgSO₄ is collected from Giles Main Plant. MgSO₄ fines are used in mixture of Primo water. Quality Technologist will notify lead operator to fill up Primo Container with fines. Two

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samples of MgSO₄ will be placed in a separate plastic bags labeled with lot number and date. One sample is kept as retain by Quality Technologist and one sample will be sent by the Quality Technologist to Chem-Bac Laboratories for Bromide Testing.

- 6.1.6 Quality Technologist will inform Operator that raw materials are approved for use in final production.
- 6.1.7 Operator must inform the Quality Technologist when $\frac{3}{4}$ of raw material has been consumed

6.2 Orders for Primo Water

- 6.2.1 Orders are taken by Quality Technologist.
- 6.2.2 Quality Technologist directs orders to Operator.
- 6.2.3 Operator will designate date of completion for finished product and shipment date.

6.3 Lot Numbers

- 6.3.1 Lot numbers will be assigned based off of the Julian date coding system

Example:

Lot 18805

This indicated that the lot was initiated on the 188th day of 2005, which is July 7, 2006. It would continue until one of three chemical components lot numbers changed. At that point, a new finished product lot number would be initiated that represents the date the lot began. Each raw material is supplied with a unique lot number, CAS number, and a certificate of analysis from Mallinckrodt for Calcium Chloride and Sodium Bicarbonate.



Example: Raw material chemicals arrive with unique lot numbers. Production begins under finished product Lot # 18805 and continues until the calcium chloride is exhausted. When a new supply of calcium chloride arrives, it has a different original lot number than the first shipment.

6.4 Preparation of Primo Water Mixture #1 and #2

Equipment: Calibrated balance and three clean beakers.

- 6.4.1 Primo #1 is 7.00 lbs of Calcium Chloride.
- 6.4.2 Primo #2 is a 7.00 lb blend of Magnesium Sulfate and Sodium Bicarbonate. The ratio is 3.82 lbs. of Magnesium Sulfate and 3.18 lbs. of Sodium Bicarbonate. Weigh out MgSO₄ and pour into pouch then, weigh out Sodium Bicarbonate and pour into pouch and shake vigoursly.

Primo Water #2 can be requested for preparation in different ratios.

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For Example:

A customer may request for 2.00 lbs of Primo mixture #2. The ratio would be calculated using this equation.

$$\frac{2.00 \text{ lbs}}{7.00 \text{ lbs}} \times 3.82 \text{ lbs. of MgSO}_4 = 1.09 \text{ lbs. MgSO}_4$$

$$\frac{2.00 \text{ lbs}}{7.00 \text{ lbs}} \times 3.18 \text{ lbs. of NaHCO}_3 = 0.91 \text{ lbs. NaHCO}_3$$

6.4.3 Operator or the Quality Technologist will request labels for pouches and corrugated from AP/AR associate (Accounts Payable/Account Receivable Associate).

6.4.4 Labels are to be placed on front of pouches.

6.4.5 Finished product pouches are to be heat sealed.

6.4.6 Labels are to be placed on the top and two opposite sides of the box it is to be shipped in.

6.4.7 Place a MSDS sheet from each ingredient in each finished product box.

6.4.8 Quality Technologist will mail a COA and Bromide Testing results for each ingredient to:

DR. Alan Leff
Primo Water
101 N Cherry Street
Suite 700
Winston Salem, NC 27101

6.5 Shipping

6.5.1 Shipments can be scheduled by the CSR-Repack-01 and the Quality Technologist.

6.5.2 Shipments that do not require pallets are to be shipped using Primo Water Federal Express account number 305329541.



6.5.3 Shipments of one skid and above must be shipped through CH Robinson.
CH Robinson Contact Information: Diana Dodd (336)757-1209.

6.5.4 Shipments must be scheduled one day in advance.

6.5.5 The number of pallets, weight, and dimensions of pallets will be needed for shipment.

6.5.6 A BOL will be faxed from CH Robinson to the CSR or the Quality Technologist. A copy of BOL must be given to the Quality Technologist, CSR, and Operator.

7.0 Reference Documents

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7.1 N/A

8.0 Amendment Record

Revision Number	Revision Date	Revision Author	Revision Description
1	2/5/2013	MM	Moved to new template