1258-1237

6/25/2003

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

June 25, 2003

Paul S. Loomis
Arch Chemicals, Inc.
501 Merritt 7
P.O. Box 5204
Norwalk, CT 06856-5204

Subject: HTH Pool Shock
EPA Registration No. 1258-1237
Application Dated: April 7, 2003
Receipt Date: April 7, 2003

Dear Mr. Gruber:

This amendment was submitted in response to a deficiency letter from the Agency dated March 13, 2003 to Arch Chemicals, Inc.

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended is accepted with comments.

Conditions

1. *Add the heading "Swimming Pool Use" directions above the "How to use section."*

2. *You must add the reentry language. "Re-entry into treated pools is prohibited above levels of 4ppm for risk of bodily injury." Please place the phrase at the end of the sections "Opening your pool," and each shock treatment/superchlorination section.*

3. *You are correct that using 2 oz. per 500 for extended non-use periods will not necessarily provide 3ppm. Change that phrase to " . . . to maintain acceptable chlorine concentration." Please do not place any label arguments on the label itself.*

	CONCURRENCES							
SYMBOL	7510C							
SURNAME	Mitchell							
DATE	6-25-03							

General Comments

The brand name for this product implies that the only uses on the label should be for swimming pools. However, you provide directions for use for spa/hot tubs and effluent treatment for sewage and wastewater. This could be misleading to the consumers unless the other uses are covered under alternate/additional brand names.

A stamped copy of the accepted labeling is enclosed. Submit a copy of your final printed labeling before distributing or selling the product bearing the revised labeling.

If you have any questions or comments concerning this letter, please contact Wanda Mitchell at (703) 308-6345.

Sincerely,

Robert S. Brennis
Product Manager - Team 32
Regulatory Management Branch II
Antimicrobials Division (7510C)

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[All text in square brackets [AAA] is optional and may/may not be included on final label]
{All text in rounded brackets {AAA} is for information purposes and will not appear on final label}

HTH POOL SHOCK
SHOCK TREATMENT & SUPERCHLORINATOR
FOR SWIMMING POOLS

KEEP OUT OF REACH OF CHILDREN (12 Pt. Type Min.)

DANGER (16 Pt. Type Min.)

[redacted]

Contamination or improper use may cause fire or explosion. Do not contaminate with any foreign matter, including other spa or pool treatment products. Add only into water. Read all precautionary statements on back label and all first aid statements before use.

ACTIVE INGREDIENTS:

CALCIUM HYPOCHLORITE	47.6%
OTHER INGREDIENTS	52.4%
TOTAL	100%

Minimum Available Chlorine...45 %

ACCEPTED
with COMMENTS
EPA Letter Dated:

JUN 25 2003

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 1258-123 237

EPA Reg. # 1258- 1237 EPA Est. # 1258-TN-1

FIRST AID:

If in eyes:
- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
  Call a poison control center or doctor for treatment advice.

If Swallowed:
- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

If Inhaled:
- Remove person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
  Call a poison control center or doctor for further treatment advice.

Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

IN CASE OF EMERGENCY CALL: 1-800-654-6911

Arch Chemicals, Inc.
501 MERRITT 7
NORWALK, CT. 06856

[redacted]

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{These weights will all be in child resistant packaging where required:} Net Wt. 8 oz. (0.227 KG); Net Wt. 10 oz. (0.284 KG); Net Wt. 12 oz. (0.341 KG); Net Wt. 14 oz. (0.397 KG); Net Wt. 1 Lb. (0.45 KG); Net Wt. 2 Lb. (0.9 KG); Net Wt. 5 Lb. (2.27 KG); Net Wt. 10 Lb. (4.54 KG); Net Wt. 15 Lb. (6.8 KG); Net Wt. 20 Lb. (9.09 KG); Net Wt. 23 Lb. (10.4 KG); Net Wt. 23.4 Lb. (10.6 KG); 25 lb. (11.3 kg.); Net Wt. 50 Lb. (22.7 KG); Net Wt. 55 Lb. (25 KG); Net Wt. 75 Lb. (34.1 KG)

[Kills bacteria], [Controls Algae], [Destroys organic contaminants], [No need to predissolve], [Routine Chlorinator],[Shock Treatment (and) Superchlorinator for Swimming Pools and Spas], [Restores a crystal clarity to pool water], [Buffered Sanitizer], [Oxidizer], [Removes organic waste and produces sparkling clean swimming pool water]. [For pool startup and weekly shock treatment], [for heavy bather loads or after heavy rains]. [Buffered for pH control]. [Will not cause over-stabilization]. [Will not cause cyanuric acid to [form] {or} [build up] in your pool]. [Contains no cyanuric acid]. [Sanitizes pool water]. [Swimming pool sanitizer]. [Good for all pool surfaces].

READ ALL PRECAUTIONARY STATEMENTS BEFORE USE.

WHY YOU SHOULD USE THIS PRODUCT

This is a highly effective multi-purpose product that sanitizes, clarifies, prevents algae and shock treats your pool. It is convenient, easy to use, and won't over-stabilize your pool. For crystal clear pool water, [the makers of HTH® recommend] {or} [follow] the following 4 step pool care program that includes:
Step 1: Test and adjust pool water balance.
Step 2: Chlorinate and clarify.
Step 3: Shock treat once a week.
Step 4: Add algaecide regularly.
Additional shocking to keep water clean and clear, is recommended after:

- Rain and heavy winds
- High number of swimmers
- Increased water temperature
- Increased frequency of pool usage

DIRECTIONS FOR USE: It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

HOW TO USE: **1.** Add the recommended dosage of this product during evening hours while the filter is running. **2.** When adding this product to your pool, broadcast the product evenly over a wide area in the deepest part of the pool. **3.** Use a clean, dry scoop, or lid to measure this product. Do not use the scoop or lid for any other purpose. [{If in bag:} Use the whole bag when opened]. **4.** If any granules settle to the bottom of the pool use brush to disperse.

WATER BALANCE: For best product performance, swimmer comfort, and crystal clear water: **1.** Maintain pH in the range of 7.2 to 7.6. {The following statement added to protect consumers against vinyl liner bleaching due to low pH and chlorination} Allow the pH adjusters to dissolve and disperse before adding this product to the pool. **2.** Maintain total alkalinity in the range of 60 to 100 parts per million (ppm). **3.** Maintain calcium hardness above 200 ppm. **4.** Maintain available chlorine level at 1-4 ppm. Use a reliable test kit that measures all these ranges. Use HTH Pool Care Products to make adjustments. Follow label directions for each product.

OPENING YOUR POOL: For best results, see the Water Balance section above before treatment. Test and adjust the pH to 7.2 to 7.6. {The following statement added to protect consumers against vinyl liner bleaching due to low pH and chlorination} Allow the pH adjusters to dissolve and disperse before adding this product to the pool. **1.** Follow "SHOCK TREATMENT" directions on this package. **2.** Allow 30 minutes for product to disperse. **3.** Test free available chlorine residual with a pool test kit. **4.** Repeat dosage, as needed, until the free available chlorine residual is 1–4 ppm.

For best results during the season, follow the HTH 4 Step Program.

[Note: For all dosages, please refer to the tables to find your exact dosage for your pool or body of water that needs treatment.]

ROUTINE CHLORINATION: For best results, see Water Balance section above before treatment. Throughout the pool season, adjust [and maintain] pH at 7.2–7.6. {The following statement added to protect consumers against vinyl liner bleaching due to low pH and chlorination} Allow the pH adjusters to dissolve and

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disperse before adding this product to the pool. Add 8-11 ounces of this product per 10,000 gallons [Add [0.8-1.1 ounces of this product per 1,000 gallons] {or} [0.4-0.6 ounces per 500 gallons] of pool water daily or as often as needed to maintain the free available chlorine residual at 1 – 4 ppm. Follow "HOW TO USE" directions on this package. If you have stabilized your pool using HTH Stabilizer and Conditioner (or similar product) add 4-6 ounces per 10,000 gallons [add 0.4-0.6 ounces per 1,000 gallons] [or] [add 0.2-0.3 ounces per 500 gallons] every other day or as often as needed to maintain the free available chlorine residual at 1-4 ppm. Follow "HOW TO USE" directions on this package.

As a preventative treatment, you should shock treat your pool once a week to prevent pool problems. In addition to weekly shock treatment, you should shock treat to remedy problems which occur when bather loads are high, water appears hazy or dull, unpleasant odors or eye irritation occur, after heavy wind and rainstorms, or if algae does develop with resulting green color and slimy feeling walls.

{The shock treatment verbiage below is consistent with the RED for hypochlorites, but the dosages have been changed to reflect the 47.6% available chlorine product strength. It also includes directions for 5 different sized single use bags, 8, 10, 12, 14, and 16 ounces.}

POOL SHOCK TREATMENT

Add the recommended dosages of this product while the filter pump is running. Adjust and maintain pH to 7.2 to 7.6 with HTH pH Plus or HTH pH Minus. Follow label directions. {The following statement added to protect consumers against vinyl liner bleaching due to low pH and chlorination} Allow the pH adjusters to dissolve and disperse before adding this product to the pool. When adding this product to your pool, broadcast this product evenly over a wide area of the deepest part of the pool.

DOSAGE RATE

{For all packaging except one time dose single use bags} [**SHOCK TREATMENT / SUPER CHLORINATION:** For best results, see "WATER BALANCE" and "HOW TO USE" section above before treatment. Every 7 days, or as necessary to prevent pool problems, shock treat / super chlorinate the pool by adding 14 to 28 ounces of this product per 10,000 gallons of water to yield 5 to 10 ppm available chlorine by weight.] *{End of section -For all packaging except one time single use bags}*

{For one time dose single use bags, use the following verbiage:}

{8 ounce bag:} [**SHOCK TREATMENT / SUPER CHLORINATION:** For best results, see "WATER BALANCE" and "HOW TO USE" section above before treatment. Every 7 days, or as necessary to prevent pool problems, shock treat / super chlorinate the pool by adding 8 to 16 ounces (one to two bags) per 5,700 gallons of water to yield 5 to 10 ppm available chlorine by weight.] *{End of 8 ounce bag}*

{10 ounce bag:} [**SHOCK TREATMENT / SUPER CHLORINATION:** For best results, see "WATER BALANCE" and "HOW TO USE" section above before treatment. Every 7 days, or as necessary to prevent pool problems, shock treat / super chlorinate the pool by adding 10 to 20 ounces (one to two bags) per 7,000 gallons of water to yield 5 to 10 ppm available chlorine by weight.] *{End of 10 ounce bag}*

{12 ounce bag:} [**SHOCK TREATMENT / SUPER CHLORINATION:** For best results, see "WATER BALANCE" and "HOW TO USE" section above before treatment. Every 7 days, or as necessary to prevent pool problems, shock treat / super chlorinate the pool by adding 12 to 24 ounces

(one to two bags) per 8,500 gallons of water to yield 5 to 10 ppm available chlorine by weight.] *{End of 12 ounce bag}* 7/12

{14 ounce bag:} [**SHOCK TREATMENT / SUPER CHLORINATION:** For best results, see "WATER BALANCE" and "HOW TO USE" section above before treatment. Every 7 days, or as necessary to prevent pool problems, shock treat / super chlorinate the pool by adding 14 to 28 ounces (one to two bags) per 10,000 gallons of water to yield 5 to 10 ppm available chlorine by weight.] *{End of 14 ounce bag}*

{16 ounce bag:} [**SHOCK TREATMENT / SUPER CHLORINATION:** For best results, see "WATER BALANCE" and "HOW TO USE" section above before treatment. Every 7 days, or as necessary to prevent pool problems, shock treat / super chlorinate the pool by adding 16 to 32 ounces (one to two bags) per 11,500 gallons of water to yield 5 to 10 ppm available chlorine by weight.] *{End of 16 ounce bag}*

[Use entire contents of bag when opened.]

{End of dosage instructions for one time dose single use bags}

An additional shock treatment may be required to correct problems which are caused by visible algae, high bathing loads, heavy wind and rainstorms. Additional shock treatments will also remove unpleasant odors and eye irritation. Check the available chlorine with a test kit. Do not reenter the pool until the chlorine residual is 1 to 4 ppm.

[redacted]

ALGAE CONTROL: **1.** Follow "SHOCK TREATMENT" directions on this label. **2.** Add this product as close as possible to any algae on the sides or bottom of the pool. **3.** Do not enter pool until the free available chlorine residual is 1-4 ppm. **4.** If necessary, repeat the treatment. **5.** To prevent possible staining or bleaching, take the following steps immediately after treatment: Thoroughly clean pool by brushing surface of algae growth, vacuum and cycle through filter.

For preventative algae control, use your preferred HTH algaecide product regularly.

WINTERIZING: For best results, see "WATER BALANCE" section above before treatment. **1.** While the water is still clear and clean, prepare for long periods of disuse by gradually adding 28 ounces of this product per 10,000 gallons of pool water. (This provides 10 ppm free available chlorine.) **2.** Follow "HOW TO USE" directions on this package. **3.** Run the filter until granules are completely dissolved. **4.** Cover the pool with a [plastic] pool cover. **5.** Prepare the heater, pump and filter components for winterizing by following manufacturer's directions.

{The dosages in the Spa/Hot-Tub Section below were changed to reflect 47.6% available chlorine product.[redacted]

SPA/HOT-TUB: For best results, see "WATER BALANCE" section above before treatment. Apply 0.7 ounces of this product per 500 gallons of water to obtain a free available chlorine concentration of 5 ppm, as determined by a suitable test kit. Adjust and maintain spa water pH to between 7.2 and 7.6. {The following statement added to protect consumers against vinyl liner bleaching due to low pH and chlorination} Allow the pH adjusters to dissolve and disperse before adding this product to the pool. Maintain these conditions for

[redacted]

proper spa and hot tub operation by frequent testing with a test kit. It is recommended that spas and hot tubs be drained every 30-90 days, more often under heavy use. Consult manufacturer's recommendations concerning the compatibility of chlorine sanitizers with their equipment. Some oils, lotions, fragrances, cleansers, etc., may cause foaming or cloudy water and may react with chlorine sanitizers to reduce their efficacy.

Regular Use: For best results, see "WATER BALANCE" section above before treatment. Turn on circulation system and ensure that it is operating properly. To maintain the water, apply 0.7 ounces of this product per 500 gallons of water over the surface to maintain a chlorine concentration of 5 ppm. Do not enter the spa until chlorine residual reaches 1-5 ppm. Test for free available chlorine and add additional product if necessary to attain a chlorine concentration of 1-5 ppm FAC. After each use, shock treat with 2 ounces of this product per 500 gallons of water, to control odors and algae. Repeat as needed.

[redacted]

Extended Non-use Period: For best results, see "WATER BALANCE" section above before treatment. During extended non-use periods when the spa or hot tub is not being used add 2 ounces of this product per 500 gallons twice a week with the circulation system running or as needed to maintain 3 ppm free available chlorine concentration.

{The dosages in the SEWAGE & WASTEWATER EFFLUENT TREATMENT Section below were changed to reflect 47.6% available chlorine product. [redacted]

SEWAGE & WASTEWATER EFFLUENT TREATMENT

The disinfection of sewage effluent must be evaluated by determining the total number of coliform bacteria and/or Fecal coliform bacteria, as determined by the Most Probable Number (MPN) procedure, of the chlorinated effluent has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction.

On the average, satisfactory disinfection of secondary waste water effluent can be obtained when the chlorine residual is 0.5 ppm after 15 minutes contact. Although the chlorine residual is the critical factor in disinfection, the importance of correlating chlorine residual with bacterial kill must be emphasized. The MPN of the effluent, which is directly related to the water quality standards requirements, should be the final and primary standard and the chlorine residual should be considered an operating standard valid only to the extent verified by the coliform quality of the effluent.

The following are critical factors affecting waste water disinfection.

1. Mixing: It is imperative that the product and the waste water be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the waste water.
2. Contacting: Upon flash mixing, the flow through the system must be maintained.
3. Dosage/Residual Control: Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level. Secondary effluent should contain 0.2 to 1.0 ppm chlorine residual after a 15 to 30 minute contact time. A reasonable average of residual chlorine is 0.5 ppm after 15 minutes contact time.

EFFLUENT SLIME CONTROL - Apply a 100 to 1000 ppm available chlorine solution at a location which will allow complete mixing. Prepare this solution by mixing 3 to 29 oz. of this product with 100 gallons of water. Once control is evident, apply a 15 ppm available chlorine solution. Prepare this solution by mixing 0.43 oz. (12 gm.) of this product with 100 gallons of water.

STORAGE & DISPOSAL

- Keep this product dry in its tightly closed container when not in use.
- Store in a cool, dry, well-ventilated area

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- Keep away from heat or open flame
- Do not reuse empty container.
- {The following statement has changed to be consistent with current labeling:} Rinse empty container thoroughly with water to dissolve all material and discard container in trash.
- Do not contaminate food or feed by storage or disposal or cleaning of equipment.
- For disposal of a contaminated or decomposing product, see Emergency Handling.

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS: DANGER. Highly corrosive.

- Causes irreversible eye damage or skin burns.
- Harmful if swallowed or absorbed through skin.
- Do not get in eyes, on skin or on clothing.
- Wear goggles or face shield.
- Wear protective clothing and rubber gloves.
- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove contaminated clothing and wash clothing before reuse.

[redacted]

CHEMICAL HAZARDS: DANGER. Strong oxidizing agent.
Add only into water. Use only clean dry utensils to dispense this product. Do not use this product in a container or dispensing device that has been used with any other product. Keep all foreign matter, including other [spa and] pool treatment products, away from this product. Do not allow to become wet or damp before use. Contamination may start a chemical reaction that can give off heat and hazardous gases and may cause a fire or explosion. Do not touch this chemical with a flame or burning material (like a lighted cigarette).

{First sentence of paragraph below for 50 lb. containers or less, complete paragraph for all other sizes}
ENVIRONMENTAL HAZARD: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, ponds, streams, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

EMERGENCY HANDLING: In case of contamination or decomposition:

1. Do not reseal container.
2. Immediately remove container to an open and well-ventilated outdoor area by itself.
3. Flood with large amounts of water until the material is dissolved.
4. Dispose of container and any remaining material in an approved landfill area.

HTH HELPLINE
Toll-Free -800-HTH-POOL (800-484-7665) (866-4POOLFUN)
Call 7 days a week with your questions concerning pool water care.
8:00 a.m. - 10:00 p.m. Eastern Time
Please visit http://www.hthpools.com (www.hthpoolife.com)

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Dosage Tables:

Enter the available chlorine in the box below

Available Chlorine	47.6%	Dosage of calcium hypochlorite required to reach given level of free available chlorine:							
	Routine Chlorination						Winterization	Effluent Slime Control	
Gallons of water	1 ppm	2 ppm	3 ppm	4 ppm	5 ppm	10 ppm	15 ppm	10 ppm	100 ppm
500	0.14 ounces	0.3 ounces	0.4 ounces	0.6 ounces	0.7 ounces	1.4 ounces	2.1 ounces	1.4 ounces	14.0 ounces
1,000	0.3 ounces	0.6 ounces	0.8 ounces	1.1 ounces	1.4 ounces	2.8 ounces	4.2 ounces	2.8 ounces	1.8 pounds
1,500	0.4 ounces	0.8 ounces	1.3 ounces	1.7 ounces	2.1 ounces	4.2 ounces	6.3 ounces	4.2 ounces	2.6 pounds
2,000	0.6 ounces	1.1 ounces	1.7 ounces	2.2 ounces	2.8 ounces	5.6 ounces	8.4 ounces	5.6 ounces	3.5 pounds
2,500	0.7 ounces	1.4 ounces	2.1 ounces	2.8 ounces	3.5 ounces	7.0 ounces	10.5 ounces	7.0 ounces	4.4 pounds
3,000	0.8 ounces	1.7 ounces	2.5 ounces	3.4 ounces	4.2 ounces	8.4 ounces	12.6 ounces	8.4 ounces	5.3 pounds
3,500	1.0 ounces	2.0 ounces	2.9 ounces	3.9 ounces	4.9 ounces	9.8 ounces	14.7 ounces	9.8 ounces	6.1 pounds
4,000	1.1 ounces	2.2 ounces	3.4 ounces	4.5 ounces	5.6 ounces	11.2 ounces	1.1 pounds	11.2 ounces	7.0 pounds
4,500	1.3 ounces	2.5 ounces	3.8 ounces	5.0 ounces	6.3 ounces	12.6 ounces	1.2 pounds	12.6 ounces	7.9 pounds
5,000	1.4 ounces	2.8 ounces	4.2 ounces	5.6 ounces	7.0 ounces	14.0 ounces	1.3 pounds	14.0 ounces	8.8 pounds
5,500	1.5 ounces	3.1 ounces	4.6 ounces	6.2 ounces	7.7 ounces	15.4 ounces	1.4 pounds	15.4 ounces	9.6 pounds
6,000	1.7 ounces	3.4 ounces	5.0 ounces	6.7 ounces	8.4 ounces	1.1 pounds	1.6 pounds	1.1 pounds	10.5 pounds
6,500	1.8 ounces	3.6 ounces	5.5 ounces	7.3 ounces	9.1 ounces	1.1 pounds	1.7 pounds	1.1 pounds	11.4 pounds
7,000	2.0 ounces	3.9 ounces	5.9 ounces	7.9 ounces	9.8 ounces	1.2 pounds	1.8 pounds	1.2 pounds	12.3 pounds
7,500	2.1 ounces	4.2 ounces	6.3 ounces	8.4 ounces	10.5 ounces	1.3 pounds	2.0 pounds	1.3 pounds	13.1 pounds
8,000	2.2 ounces	4.5 ounces	6.7 ounces	9.0 ounces	11.2 ounces	1.4 pounds	2.1 pounds	1.4 pounds	14.0 pounds
9,000	2.5 ounces	5.0 ounces	7.6 ounces	10.1 ounces	12.6 ounces	1.6 pounds	2.4 pounds	1.6 pounds	15.8 pounds
10,000	2.8 ounces	5.6 ounces	8.4 ounces	11.2 ounces	14.0 ounces	1.8 pounds	2.6 pounds	1.8 pounds	17.5 pounds
11,000	3.1 ounces	6.2 ounces	9.3 ounces	12.3 ounces	15.4 ounces	1.9 pounds	2.9 pounds	1.9 pounds	19.3 pounds
12,000	3.4 ounces	6.7 ounces	10.1 ounces	13.5 ounces	1.1 pounds	2.1 pounds	3.2 pounds	2.1 pounds	21.0 pounds
13,000	3.6 ounces	7.3 ounces	10.9 ounces	14.6 ounces	1.1 pounds	2.3 pounds	3.4 pounds	2.3 pounds	22.8 pounds
14,000	3.9 ounces	7.9 ounces	11.8 ounces	15.7 ounces	1.2 pounds	2.5 pounds	3.7 pounds	2.5 pounds	24.5 pounds
15,000	4.2 ounces	8.4 ounces	12.6 ounces	1.1 pounds	1.3 pounds	2.6 pounds	3.9 pounds	2.6 pounds	26.3 pounds
16,000	4.5 ounces	9.0 ounces	13.5 ounces	1.1 pounds	1.4 pounds	2.8 pounds	4.2 pounds	2.8 pounds	28.1 pounds
17,000	4.8 ounces	9.5 ounces	14.3 ounces	1.2 pounds	1.5 pounds	3.0 pounds	4.5 pounds	3.0 pounds	29.8 pounds
18,000	5.0 ounces	10.1 ounces	15.1 ounces	1.3 pounds	1.6 pounds	3.2 pounds	4.7 pounds	3.2 pounds	31.6 pounds
19,000	5.3 ounces	10.7 ounces	1.0 pounds	1.3 pounds	1.7 pounds	3.3 pounds	5.0 pounds	3.3 pounds	33.3 pounds
20,000	5.6 ounces	11.2 ounces	1.1 pounds	1.4 pounds	1.8 pounds	3.5 pounds	5.3 pounds	3.5 pounds	35.1 pounds
25,000	7.0 ounces	14.0 ounces	1.3 pounds	1.8 pounds	2.2 pounds	4.4 pounds	6.6 pounds	4.4 pounds	43.8 pounds
30,000	8.4 ounces	1.1 pounds	1.6 pounds	2.1 pounds	2.6 pounds	5.3 pounds	7.9 pounds	5.3 pounds	52.6 pounds
35,000	9.8 ounces	1.2 pounds	1.8 pounds	2.5 pounds	3.1 pounds	6.1 pounds	9.2 pounds	6.1 pounds	61.4 pounds
40,000	11.2 ounces	1.4 pounds	2.1 pounds	2.8 pounds	3.5 pounds	7.0 pounds	10.5 pounds	7.0 pounds	70.1 pounds
45,000	12.6 ounces	1.6 pounds	2.4 pounds	3.2 pounds	3.9 pounds	7.9 pounds	11.8 pounds	7.9 pounds	78.9 pounds
50,000	14.0 ounces	1.8 pounds	2.6 pounds	3.5 pounds	4.4 pounds	8.8 pounds	13.1 pounds	8.8 pounds	87.7 pounds

55,000	15.4 ounces	1.9 pounds	2.9 pounds	3.9 pounds	4.8 pounds	9.6 pounds	14.5 pounds	9.6 pounds	96.4 pounds
60,000	1.1 pounds	2.1 pounds	3.2 pounds	4.2 pounds	5.3 pounds	10.5 pounds	15.8 pounds	10.5 pounds	105.2 pounds
65,000	1.1 pounds	2.3 pounds	3.4 pounds	4.6 pounds	5.7 pounds	11.4 pounds	17.1 pounds	11.4 pounds	114.0 pounds
70,000	1.2 pounds	2.5 pounds	3.7 pounds	4.9 pounds	6.1 pounds	12.3 pounds	18.4 pounds	12.3 pounds	122.7 pounds
75,000	1.3 pounds	2.6 pounds	3.9 pounds	5.3 pounds	6.6 pounds	13.1 pounds	19.7 pounds	13.1 pounds	131.5 pounds
80,000	1.4 pounds	2.8 pounds	4.2 pounds	5.6 pounds	7.0 pounds	14.0 pounds	21.0 pounds	14.0 pounds	140.3 pounds
85,000	1.5 pounds	3.0 pounds	4.5 pounds	6.0 pounds	7.5 pounds	14.9 pounds	22.4 pounds	14.9 pounds	149.0 pounds
90,000	1.6 pounds	3.2 pounds	4.7 pounds	6.3 pounds	7.9 pounds	15.8 pounds	23.7 pounds	15.8 pounds	157.8 pounds
95,000	1.7 pounds	3.3 pounds	5.0 pounds	6.7 pounds	8.3 pounds	16.7 pounds	25.0 pounds	16.7 pounds	166.5 pounds
100,000	1.8 pounds	3.5 pounds	5.3 pounds	7.0 pounds	8.8 pounds	17.5 pounds	26.3 pounds	17.5 pounds	175.3 pounds
200,000	3.5 pounds	7.0 pounds	10.5 pounds	14.0 pounds	17.5 pounds	35.1 pounds	52.6 pounds	35.1 pounds	350.6 pounds
300,000	5.3 pounds	10.5 pounds	15.8 pounds	21.0 pounds	26.3 pounds	52.6 pounds	78.9 pounds	52.6 pounds	525.9 pounds
400,000	7.0 pounds	14.0 pounds	21.0 pounds	28.1 pounds	35.1 pounds	70.1 pounds	105.2 pounds	70.1 pounds	701.3 pounds
500,000	8.8 pounds	17.5 pounds	26.3 pounds	35.1 pounds	43.8 pounds	87.7 pounds	131.5 pounds	87.7 pounds	876.6 pounds
600,000	10.5 pounds	21.0 pounds	31.6 pounds	42.1 pounds	52.6 pounds	105.2 pounds	157.8 pounds	105.2 pounds	1051.9 pounds
700,000	12.3 pounds	24.5 pounds	36.8 pounds	49.1 pounds	61.4 pounds	122.7 pounds	184.1 pounds	122.7 pounds	1227.2 pounds
800,000	14.0 pounds	28.1 pounds	42.1 pounds	56.1 pounds	70.1 pounds	140.3 pounds	210.4 pounds	140.3 pounds	1402.5 pounds
900,000	15.8 pounds	31.6 pounds	47.3 pounds	63.1 pounds	78.9 pounds	157.8 pounds	236.7 pounds	157.8 pounds	1577.8 pounds
1,000,000	17.5 pounds	35.1 pounds	52.6 pounds	70.1 pounds	87.7 pounds	175.3 pounds	263.0 pounds	175.3 pounds	1753.2 pounds

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