HACCP Plan Template for Acidification of Rice in compliance with California Retail Food Code Requirements

Date_____

San Francisco Department of Public Health
Environmental Health Branch
Food Safety Section
1390 Market Street Ste 210
San Francisco, CA 94102

Dear Food Safety Division,

I am submitting this HACCP Plan to request approval to deviate from the California Retail Food Code requirement that requires potentially hazardous food (PHF) be maintained below 41 degrees F. As per section 114419, the HACCP plan is required because a food additive, such as vinegar is being used as a method of food preservation, rather than as a method of flavor enhancement, or to render a food so that it is not a Potentially Hazardous food.

Name of Food Establishment (FE): _____

Person in Charge (PIC): _____

(Permit) Number: _____

Address of FE: _____

Phone Number of FE: _____

As Permit Holder, I am requesting approval to operate under a HACCP plan rather than hot or cold hold rice, which has instead been acidified to a pH level at or below 4.1. [**The requester must include a Hazard Analysis Critical Control Point (HACCP) Plan.]**

I understand that this request may take 30 business days to review. Thank you for the consideration.

Name of Permit Holder:_____

Mailing Address: _____

Email Address: _____

Home / Cell Phone Number:_____

Contents of a Hazard Analysis Critical Control Point (HACCP) Plan

A HACCP plan is required when food additives or components, such as vinegar, are used to render a food non time/temperature control for safety food (food not requiring refrigeration to prevent microbial growth) such as sushi rice, according to the California Retail Food Code Section 114419. The HACCP plan shall indicate all of the following pursuant to the California Retail Food Code section 114419.1:

The following must be included in the sushi rice HACCP Plan:

- A **categorization of the types of (TCS) foods** that are specified in the menu such as rice and fish and **identification of the pathogens of concern**.
- A **flow diagram** of the specific food identifying the Critical Control Points (CCPs) providing the following information:
  - Ingredients, materials, and equipment used in the preparation of that food.
  - Formulations or recipes that address the food safety concerns involved with that type of food and the methods to control for those concerns.
- A **recipe** or formulation for the sushi rice HACCP Plan which must include all of the following:
  - Type of rice, (for example "short grain").
  - The concentration of the vinegar, (for example: 4 percent).
- **Methods** of cooking rice include the time and temperature. **Methods** of preparing vinegar mixture (for example: vinegar, salt, and sugar). **Method** of cooling cooked rice, indicate time and temperature. **Method** of mixing rice and vinegar solution.
- Create HACCP Plan. Identify **CCPs**. Identify your **Critical Limits** (CL).
- **Methods** of measuring and the frequency of monitoring your CCP (for example: measuring the pH daily by using a pH meter accurate to +/- 0.2 or pH test strips accurate to +/- 0.5).
- Describe the **corrective action** (for example: if the pH is not less than 4.1, more vinegar will be added to the sushi rice and the rice will be retested, after second test if pH is not less than 4.1, the rice is to be discarded).
- **Policy and procedures** regarding storage of sushi rice should indicate holding time and temperature (for example: eight hours at 70 degrees F to 80 degrees F). Describe **policy** regarding remaining sushi rice following the holding time (for example: discard leftover sushi rice after eight hours).
- Describe **policy** regarding record keeping. For example: all records for the sushi rice HACCP plan and the related documents are to be kept on-site for at least two years.
- **Sanitation Standard Operating Procedures (SSOPs)** including methods for food employee and supervisory training.
- Example of **consumer advisory** and **letter of guarantee** from seafood/fish supplier for parasite destruction.
- The method and frequency for the Person in Charge to routinely verify that the food employee is following standard operating procedures and monitoring critical control points.

SAMPLE #1 Nigiri/Maki Roll (Raw Fish) and Sushi Rice HACCP

HACCP Critical Control Points									
Critical Control Point (CCP)	Hazard (biological, physical, chemical)	Critical Limits (CL) for each CCP	*Monitoring*				Corrective action	Verification	Records
			What	How	When	Who			
Fish frozen for parasite destruction (except tuna species that are exempt)	Biological – parasites in fish served raw or under cooked	Frozen to -4 degrees F for seven days	Freezing time and temperature	Letter from Supplier	Annually or before new supplier starts delivery	Manager	If no letter/ temperature log is available; fish will be served cooked	Letter from supplier/ temperature log	Current supplier letter/ frozen fish temp. logs available for two years
Rice acidification	Biological – sport forming *Bacillus cereus*	Rice pH ≤4.1	Rice pH	pH meter/ pH test strips Record pH and batch # on sushi rice log sheet	Measure pH of each batch 15 minutes after prepared	Sushi Chef	If pH is above 4.2 add vinegar one TBSP and stir. Recheck pH until pH is <4.2. Check recipe to prevent future correction	Manager to check sushi rice log and pH meter calibration log daily	pH meter calibration log and sushi rice log available for two years.

SAMPLE #2 Employee Hazard Analysis Critical Control Point (HACCP) TRAINING

Procedures

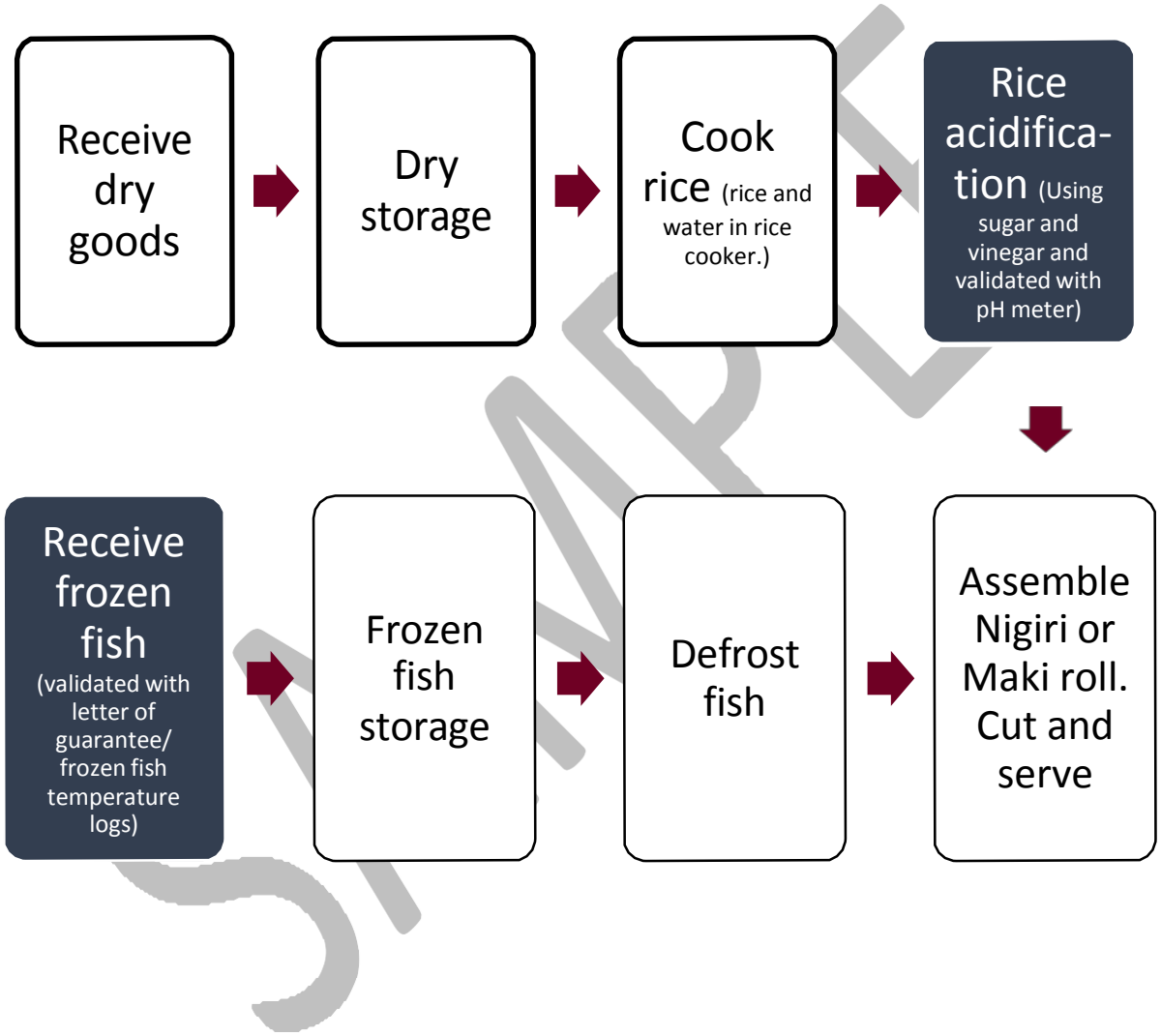
1. All employees will be trained to use the approved HACCP Plan.
2. Training covers critical control point identification, monitoring of critical control points, and corrective actions.
3. Log sheets will be used to monitor product critical control points during the preparation process.
4. The log sheets will be available at all times during operation for monitoring by management.
5. All employees will be trained in basic food safety including:
    a. personal hygiene and proper hand washing.
    b. Division of Public Health Food Employee Health Interview and Agreement for restriction and exclusion for foodborne illness exposure, symptoms, and/or diagnosis.
    c. cleaning and sanitizing methods.
    d. thermometer calibration.
    e. use of pH test strips/use and calibration of a pH meter.
6. Employees will be retrained yearly or as needed for required corrective action.

Training Log: (Employee Name)	
Training Type	Trainer Name and Date

SAMPLE #3 Sushi Rice Flow Chart

This analysis identifies the Critical Control Points (CCPs) in the preparation of two (2) foods (sushi rice and fish) that are time/temperature controlled for safety (TCS).

CCPs are shaded.



SAMPLE #4 Example Ingredients and Recipe/ Methods

Ingredients:
Extra fancy (short grain) rice: 7 lbs.
Water: 8 lbs.
Distilled white vinegar (reduced to 4 percent acidity): 15 oz.
Sugar: 12 oz.
Salt: 5 oz.

Equipment:
Rice cooker
Thermometer
pH meter
Log sheets
Clock

Pre-preparation:

1. Assemble all ingredients and equipment.
2. Verify rice cooker clean and in good repair because dirty or damaged equipment can harbor bacteria and lead to foodborne illness.
3. Add 7 lbs. rice to pot, and wash rice by agitate with clean gloved hands three times, partially fill pot each time and visually inspect rice for physical contaminates and remove any debris that may be present and drain water.
4. Add 8 lbs. from a potable water source taking into account the water added during the washing process. So the total weight of rice and water is 15 lbs.

Preparation:

5. Put the rice into rice cooker until rice is thoroughly cooked, approximately 30 minutes. The rice will boil at 212 degrees F. Be sure not to lift lid during cooking process. When the rice is cooked, the “keep warm” light will be on. The rice now is pasteurized and all vegetative pathogens are reduced to a safe level. Spores for *Bacillus cereus* survive.
6. While the rice is cooking, combine the distilled white vinegar (reduced to 4 percent acidity), sugar, and salt into a small stainless steel pot and heat the mixture until the sugar has dissolved (about 160 degrees F), stirring constantly, remove from heat, and set aside.
7. Use spatula to empty rice cooker and put it into a large stainless steel container or baking sheet, need to be sure the rice container is clean and in good repair. Layer of rice in container cannot be greater than two inches in depth. Spread the rice evenly over the bottom with a stainless steel spoon. Placing rice in a larger container speeds the cooling process and makes it easier to mix the vinegar mixture into the rice.
8. Run a spatula through the rice (about 80 degrees F) using right and left slicing motions to separate the grains. At the same time, slowly add about 32 oz. vinegar mixture (about 80 degrees F). Make sure all rice is evenly coated with vinegar mixture so that all rice reaches the appropriate pH (less or equal to 4.1) 32 oz. of vinegar mixture is added to acidify the rice and add flavor. More vinegar mixture may be added if target pH (less or equal to 4.1) is not reached. Let cool to room temperature (about 30 minutes).
9. Check the pH of the rice mixture by using a calibrated pH meter. The pH must be 4.1 or less to prevent the growth of *Bacillus Cereus*. If it is above the required range, add more vinegar mixture to it and repeat steps 7 and 8 and record the reading in the corrective action of the sushi rice pH log. The rice does not need to be refrigerated, because it is at a safe pH and is no longer a time/temperature control for safety (TC) food. Keep covered to prevent drying. Sushi rice quality can last up to eight hours. After eight hours the sushi rice must be discarded.

Critical Control Point: A pH of 4.1 or below is used to control bacteria and must be strictly followed. So it is a must to verify pH is 4.1 or below using a calibrated pH meter for each batch and record pH on production log and the restaurant manager will review the record weekly

Method for verifying pH:

1. After the rice is finished cooking, acidify immediately. Then, the finished rice is allowed to equilibrate for at least 30 minutes before pH is tested.
2. Gather a little rice from five different places in the rice container – (four corners and the middle). The amount is approximately ¼ cup or the size of a golf ball or a small red potato.
3. Place this ¼ cup of rice from the batch being tested into a clean cup.
4. Add ¼ cup of distilled water to the solo cup containing rice. The water should be at room temperature (approximately 77 degrees F.). The cup will contain ½ water and ½ rice.
5. Manually mix the rice and distilled water in the cup with a spoon for about 10 seconds. Allow the mixture to stand for an additional 10 seconds.
6. Gently tilt the cup so that there is a separation of water from the rice.
7. Stick the pH meter tip into the liquid trying to avoid touching the rice to determine the pH level. Record the pH meter reading in column pH. The target pH is 4.1 or below.
8. If the rice is above 4.1, re-acidify until it is 4.1 or less.
9. Records are reviewed, signed, and dated for each batch of rice.

Note: A pH meter is required (or pH test strips that are in the acidic range). The pH meter must be calibrated at least once per week and documented. This is accomplished by dipping the meter in a buffer solution. The buffer solution should be chemically set to a specific pH level to get an accurate reading. Follow manufacturer's specifications for calibration.

Preparation of Nigiri or Maki Roll:

Ingredients:
Sushi rice
Fish
Other ingredients
Seaweed wrap (Nori)
Water

Equipment:
Plastic food service film
Bamboo mat
Small bowl

All the sushi chefs wear gloves each time they prepare the food. Bamboo and plastic mats are lined with plastic food service film and re-wrapped every four hours of continuous use and between contact with different sushi products. All mats are cleaned and sanitized daily. All cutting surfaces are cleaned to avoid cross contamination.

All approved fish is maintained in the freezer. When fish is needed, it is removed from the freezer, and placed in the walk-in cooler (temperature ≤41degrees F) to defrost. When they have been totally defrosted, the package is opened and the fish is placed into the sushi case (temperature ≤41degrees F), covering the fish with plastic to protect from possible contamination.

Critical Control Point: Fish are frozen at -4 degrees F or lower for seven days in accordance with parasite destruction regulations.

When the nigiri or maki roll order is placed, the fish that has been ordered will be taken out of sushi case, cut up, and used with the sushi rice which has been previously prepared. All the leftover fish in the sushi case are discarded within two days. All sushi rice will be thrown away if not finished within eight hours. All the knives, chopping board, bamboo, and container will be washed, rinsed, and sanitized to keep them clean between every order.

SAMPLE #5 Example Logs
Sushi Rice Log
Frequency – EVERY BATCH
Manager checks once per week.
Maintain these records for two years.

Date	Time	Batch #	pH	Comments/ Corrective Actions	Initials

pH Meter Calibration Log
Frequency – EVERY WEEK

Date	pH 2 (place check mark below)	pH 7 (place check mark below)	pH 10 (place check mark below)	Initials

Frozen Fish Log

For in house parasite destruction, must maintain temperature of -4degrees F for at least seven days.

Type of Fish	Day	Date	Temperature (degrees F)	Initials
	1			
	2			
	3			
	4			
	5			
	6			
	7			

SAMPLE #6 Example Manufacturer Specifications

Manufacturer's specifications for rice cooker

Project: _____ Item No: _____

SR-2363Z
20-Cup Commercial Electric Rice Cooker

Specifications	
SR-2363Z	
Power Supply	120V AC, 60 Hz
Power Consumption	Cooking: 1400W; Keep Warm: 98W
Capacity	20 cups
Unit:	
Dimensions (h x w x d)	14.2 x 16.9 x 14.8
Net Weight	21 lbs.
Exterior Color	White Stripe
Master Pack (shipping):	
Master Pack Qty.	1 carton
Dimensions (l x w x d)	15.6 x 16.9 x 16.9
Shipping Weight	21 lbs.
Shipping Cube	2.58 cu. Ft.

Panasonic's Electric Rice Cooker is ideal for restaurants, banquets, supermarkets, catering, and institutional applications.

— Automatic Cooking Setting

—Superior Holding Capability

—Heavy Duty Non-Stick Coated Pan

—Locking Lid with Silicone Rubber Seal

—Magnetic Rice Scoop Holder

Automatic Cooking Feature
This feature makes the rice cooker easy to use. It automatically cooks the rice and switches to the keep warm feature when cooking is done.

Superior Holding
Not only does it have a heater on the bottom but the sides too, to keep rice moist throughout the pan.

Heavy Duty Non-stick Coated Pan
Non-stick, removable coated pan makes for easy cleanup and helps prevent cooked rice from sticking.

Locking Lid with Silicone Rubber Seal
Maintains proper pressure and moisture to eliminate soggy and mushy rice for better tasting rice.

Magnetic Rice Scoop Holder
For added convenience, the rice scoop holder can be attached to the body of the rice cooker.

20-Cup Capacity
The SR-2363Z can cook up to approximately 50 – 60, 3 oz. servings in 30 minutes or less.

NSF Approved
The SR-2363Z is built with durability and attention to safety that has been tested and certified by the NSF International, the Public Health and Safety Company™ with the National Sanitation Foundation.

Easy-to-use Carrying Handles
Convenient carrying handles provides easy maneuverability and transportation.

Multi-Language Operating Instructions
English/Chinese/Korean/Vietnamese

Panasonic ideas for life

Panasonic Appliance & Commercial Group
Division of Matsushita Electric Corporation of America
Executive Offices:
One Panasonic Way, Panazip 4A-1, Secaucus, NJ 07094
Toll Free: 1-888-350-9590
www.panasonic.com/cmo

Manufacturer's specifications for digital thermometer

Product Specifications

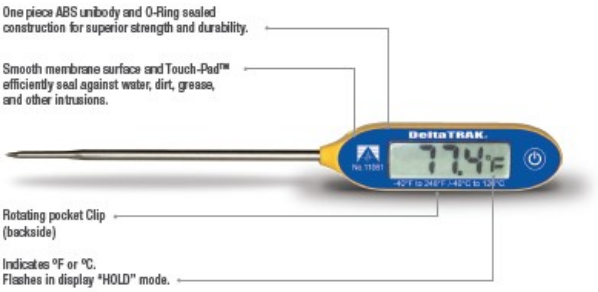
FlashCheck. Industrial Digital Probe Thermometer

Measurement Range	-40°F to 311°F (-40°C to 155°C)
Accuracy	±1°F(14°F to 194°F), ±0.5°C (-10°C to 90°C) or ±1% whichever is greatest
Response Time	Less than 6 seconds 32°F to 77°F (0°C to 25°C)
Resolution	0.1°(F or C)
Display Size/Update	1.5" x 0.5" (38mm x 12.7mm)/Every 2 Seconds
Waterproof Rating	IP56
Probe Length and Tip Diameter	Stainless steel probe, length 3.9 +/- 0.004 in. (99 +/- 0.1mm); Reduced probe tip 0.1 in (2.6mm) dia.
Body	ABS plastic
Factory Calibration	NIST traceable calibration certified
Compliance Certificate	Manufacturers certificate of compliance available from DeltaTrak, NIST Traceable, CE
Battery	1.5V button

DeltaTrak manufactures products under an ISO 9000 registered quality management system

Patent No.
5,709,476
5,801,968

CE



Model 11061

This unique, next-generation, Digital Pocket Probe Thermometer is engineered to set the industry standard for accuracy, durability and readability. It is designed and constructed under exacting standards to meet and exceed specifications required for commercial and professional uses.

- New "Auto-Calibration" feature
- Reduced tip probe provides less than six (6) second response time
- Probe cover with a magnet designed to attach thermometer to a vent
- Sealed unibody construction and RoHS-compliant
- IP56 waterproof and grease resistant
- Velcro strap included to secure thermometer to refrigerant pipes
- High visibility yellow casing

SS0010 13K1

DeltaTrak.

3 P.O. Box 398 Pleasanton, CA 94566 USA | p (925) 249-2250 | (800) 962-6776 | f (925) 249-2251 | www.deltatrak.com

Manufacturer's specifications for pH meter

Cole-Parmer®

In the U.S.
625 E. Bunker Court
Vernon Hills, IL 60061
Call toll-free 800-323-4340
Phone: 847-549-7600
Fax: 847-247-2929
www.coleparmer.com

In Canada
Call toll-free 800-363-5900
Phone: 514-355-6100
Fax: 514-355-7119
www.coleparmer.ca

In India
Phone: 91-22-6716-2222
Fax: 91-22-6716-2211
www.coleparmer.in

In the United Kingdom
Free phone: 0500-345-300
Phone: 020-8574-7556
Fax: 020-8574-7543
www.coleparmer.co.uk

International customers
Call 847-549-7600 to reach our International Sales Department or contact your local dealer.

FREE TECHNICAL APPLICATIONS ASSISTANCE!

APPLICATIONS

Drinking water, hydroponics, classroom, environmental studies, field work, basic lab use, and anywhere where you frequently have to replace lost or broken pH meters!

PERFORMANCE SPECIFICATIONS

- Hold function allows you to lock a measured value
- Auto-off feature prolongs battery life
- Clear cover serves as a solution holder
- Built-in belt clip allows you to keep meter accessible when not in use

Range: 0.0 to 14.0 pH
Resolution: 0.1 pH
Accuracy: ±0.1 pH
Temperature compensation: automatic
Calibration: up to three point
Buffer recognition: 4.0, 7.0, or 10.0
Operating temperature: 32 to 122°F (0 to 50°C)
Display three-digit vertical LCD
Power: four 1.5 V button cell batteries (included)
Battery life: >300 hours
Dimensions: 6¼"L x 1⅝"W x 1⅛"H

Catalog number	Description
ML-35423-10	Waterproof EcoTestr™ pH 2 Pocket Meter

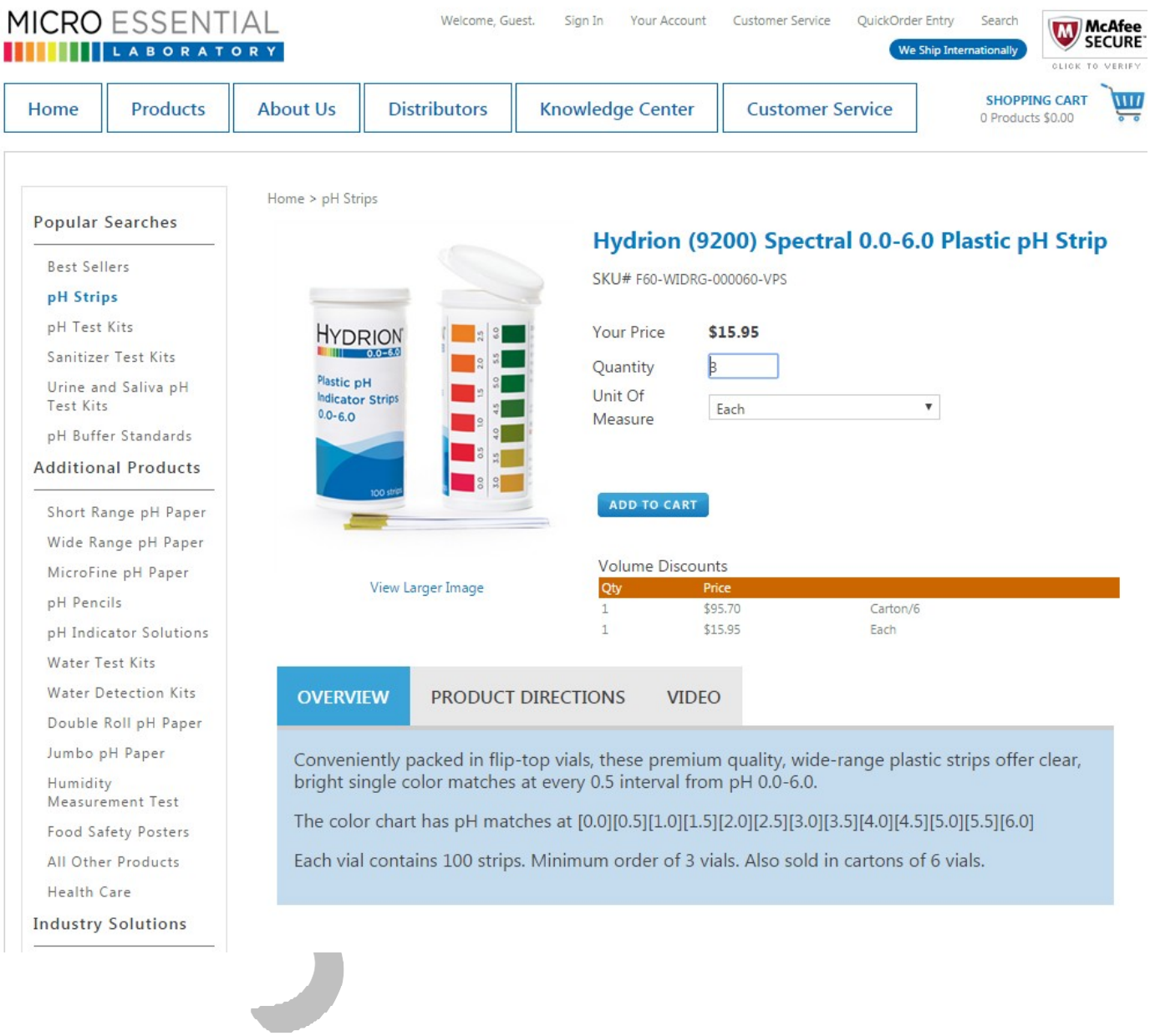
ML-09377-16 **Replacement batteries,** 1.5 V. Pack of 6

What's included:
Four 1.5 V button cell batteries

2918

ColeParmer.com

Manufacturer's specifications for pH test strips for 0.0-6.0 pH



SAMPLE #7 Consumer advisory as per California Retail Food Code section 114093

*Note the disclosure and the reminder

SAMPLE List of components of application for approval of a HACCP plan for (sushi) rice

1) Hazard Analysis Critical Control Point Plan (See Sample #1)
2) Training plan (See Sample #2)
3) Flow chart for food preparation (See Sample #3)
4) Ingredients and recipes (See Sample #4)
5) Example logs (See Sample #5)
6) Manufacturer's specifications for equipment; including methods for calibration if necessary (rice cooker, thermometer, pH meter, pH test strips - See Sample #6 attachments)
7) Example consumer advisory that is in compliance with 114093 of the California Retail Food Code (See Sample #7) and note to advise on allergens if required

HACCP Plan Template for Acidification of Rice in compliance with California Retail Food Code Requirements

This is a template to be used in the preparation of a HACCP plan for sushi rice in a permitted food establishment in San Francisco. The template is sourced from the Delaware Health and Social Services Division of Public Health, with modifications. Applicants are still required to submit details pertaining exactly to the applicant's operation. The equipment used in this sample is not endorsed by the San Francisco Department of Public Health and is only used as an example for this template.