

# In-Fact 304



## Technical Dossier

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S H E P A R D   B R O S .   I N C .

# IN-FACT 304

## Chlorinated Foam Cleaner

### PRODUCT DESCRIPTION

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**IN-FACT 304** is a self-foaming, chlorinated liquid detergent formulated for the spray, soak, and foam cleaning of dairy and food processing equipment.

### PROPERTIES AND BENEFITS

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- High foaming formulation.
- Built-in water conditioner. Heavy-duty chelate prevents scale formation.
- Ideal blend of wetting agents for maximum soil penetration and removal.
- Excellent foam stability.
- Versatile one-product, multi-job cleaner.
- Works in all water conditions.
- Leaves stainless steel bright and shiny; prevents hard water precipitates.
- Attacks and removes protein soils and fats.
- Clear, free rinsing.

### DIRECTIONS

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For heavy soils use at 2-6 fluid oz. per gallon of water.  
For lighter soils use at 1-2 fluid ounces per gallon of water.

Consult your Shepard Bros., Inc. representative for specific use instructions and recommended dispensing equipment.

### PROPERTIES AND SAFE HANDLING

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A Safety Data Sheet containing detailed information regarding the properties and safe handling of **IN-FACT 304** is available on request and should be reviewed prior to using this product.

(Rev. 01/17)

The technical information and use suggestions herein are presented in good faith and are believed to be reliable. They do not constitute a part of our terms and conditions of sale unless specifically incorporated in our Order Acknowledgement. Nothing herein shall be deemed to constitute a warranty, expressed or implied, that said information or data are correct, or that the product described is merchantable or fit for a particular purpose, or that said information, data or product can be used without infringing patents of a third party. The purchaser must determine individually, by preliminary tests or otherwise, the suitability of this product for the intended purpose.

Shepard Bros., Inc.

503 S. Cypress St. La Habra, CA 90631

(800) 645-3594

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Code:</b>	IF304		
<b>Product Name:</b>	In-Fact 304		
<b>Company Name:</b>	Shepard Bros. Inc. 503 S. Cypress St. La Habra, CA 90631	<b>Phone Number:</b>	+1 (562)697-1366
<b>Web site address:</b>	www.shepardbros.com		
<b>Emergency Contact:</b>	CHEMTREC		+1 (800)424-9300

**Product Category:**

## 2. HAZARDS IDENTIFICATION

**Skin Corrosion/Irritation, Category 1A**



<b>GHS Signal Word:</b>	<b>Danger</b>
<b>GHS Hazard Phrases:</b>	H314 - Causes severe skin burns and eye damage.
<b>GHS Precautionary Phrases:</b>	P260 - Do not breathe dust/fume/gas/mist/vapors/spray. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P273 - Avoid release to the environment.
<b>GHS Response Phrases:</b>	P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P363 - Wash contaminated clothing before reuse. P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 - Immediately call a POISON CENTER or doctor/physician. P321 - Specific treatment see Section 4 reference to supplemental first aid instruction - if immediate measures are required.
<b>GHS Storage and Disposal Phrases:</b>	P501 - Dispose of contents and containers in accordance with local, regional, national, and international regulations.
<b>Other Hazards:</b>	Toxic to aquatic life.
<b>Potential Health Effects (Acute and Chronic):</b>	Prolonged or repeated eye contact may cause conjunctivitis. Prolonged or repeated skin contact may cause dermatitis. Chronic: Effects may be delayed.
<b>Inhalation:</b>	Inhalation of mists may be severely irritating or corrosive to the nose, mouth, throat, mucous membranes, and lungs. Exposure may cause the production of lung edema, which can result in shortness of breath, sneezing, coughing, choking, chest pain, and impairment of lung function. Inhalation of high mist concentrations may result in permanent lung damage.
<b>Skin Contact:</b>	May cause severe irritation and possible burns. May cause redness, swelling, burning sensation, pain, and possible scab formation. Prolonged exposure may cause the destruction of the dermis with impairment of the skin, at site of contact, to regenerate.
<b>Eye Contact:</b>	May cause severe irritation and possible burns. May cause tearing, redness, swelling,



# SAFETY DATA SHEET

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Supersedes Revision: 08/13/2012

pain and mucous discharge. May cause impairment of vision and corneal damage. May cause eye damage. Effects may be delayed.

**Ingestion:**

Ingestion may cause severe irritation to the entire gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, abdominal discomfort or pain, and diarrhea. Can cause bleeding and/or tissue ulceration.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
1310-58-3	Potassium hydroxide	9.0 -13.0 %
1643-20-5	Dodecyldimethylamine oxide	1.0 -10.0 %
7681-52-9	Sodium hypochlorite	1.0 -3.0 %

### 4. FIRST AID MEASURES

**Emergency and First Aid****Procedures:****In Case of Inhalation:**

Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Do NOT use mouth-to-mouth resuscitation. Call a physician.

**In Case of Skin Contact:**

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Gently wash with plenty of soap and water. Wash contaminated clothing separately before reuse. Get medical attention immediately.

**In Case of Eye Contact:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do after 5 minutes and continue rinsing for an additional 15 minutes. Get medical attention immediately.

**In Case of Ingestion:**

Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Note to Physician:**

If ingested, consideration should be given to careful endoscopy as stomach or esophageal burns, perforations, or strictures may occur. Careful gastric lavage with an endotracheal tube in place should be considered. Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

### 5. FIRE FIGHTING MEASURES

**Flash Pt:** NA Method Used: Not Applicable

**Explosive Limits:** LEL: No data. UEL: No data.

**Autoignition Pt:** NA

**Suitable Extinguishing Media:** Use water fog, dry chemical, carbon dioxide, or regular foam.

**Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool.

**Flammable Properties and Hazards:** High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, chloride fumes, dense irritating smoke, and oxides of: sulfur, nitrogen, potassium, sodium, Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.

**Hazardous Combustion Products:** High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, chloride fumes, dense irritating smoke, and oxides of: sulfur, nitrogen, potassium, sodium, Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.

## 6. ACCIDENTAL RELEASE MEASURES

**Protective Precautions,  
Protective Equipment and  
Emergency Procedures:**

Use proper personal protective equipment as indicated in Section 8.

**Environmental Precautions:**

Do not let product enter drains, sewers, watersheds or water systems.

**Steps To Be Taken In Case  
Material Is Released Or  
Spilled:**

Provide ventilation. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Land spill: Dike spill. Pick up the bulk of liquid using a pump or a vacuum truck, or absorb liquid in sand or a commercial absorbent. Transfer material into an approved container for possible recovery and reuse or for disposal. Neutralize the hypochlorite or available chlorine with a dilute solution of sodium sulfite or sodium thiosulfate. Neutralize the alkalinity, of the remaining liquid, using a dilute acid solution that is appropriate for neutralizing alkaline liquids. Liberally cover the spill area with sodium bicarbonate. Flush the spill area with water and collect the rinsates for disposal or sewer, as appropriate.

Water Spill: Stop or divert water flow. Dike contaminated water and remove for disposal and/or treatment. Notify all downstream users of possible contamination.

## 7. HANDLING AND STORAGE

**Precautions To Be Taken in  
Handling:**

Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

**Precautions To Be Taken in  
Storing:**

Store in a cool, dry, well-ventilated area away from incompatible substances. Store in a tightly closed container. Keep container closed when not in use. Protect containers against damage.

**Other Precautions:**

Always add this product to water with adequate mixing when making solutions. Do not add this product to acids or acidic sanitizers and cleaners as this liberates toxic, corrosive chlorine gas. Handle in accordance with good industrial hygiene and safety practices. Keep out of reach of children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
1310-58-3	Potassium hydroxide	No data.	CEIL: 2 mg/m3	No data.
1643-20-5	Dodecyldimethylamine oxide	No data.	No data.	No data.
7681-52-9	Sodium hypochlorite	No data.	No data.	No data.
CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
1310-58-3	Potassium hydroxide	NIOSH	TWA: 1 mg/m3 CEIL: 2 mg/m3	



# SAFETY DATA SHEET

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<b>Respiratory Equipment (Specify Type):</b>	For exposure above the OSHA-PEL or ACGIH-TLV, wear a NIOSH approved full-facepiece or half mask air-purifying cartridge respirator equipped with a good mist/particulate filter or supplied air.
<b>Eye Protection:</b>	Wear chemical goggles unless a full facepiece respirator is worn.
<b>Protective Gloves:</b>	Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene gloves. nitrile gloves.
<b>Other Protective Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure. Chemical resistant apron. Rubber or neoprene boots.
<b>Engineering Controls (Ventilation etc.):</b>	Use a local or general, mechanical exhaust ventilation system capable of maintaining emissions in the work area, below the OSHA-PEL or ACGIH-TLV. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
<b>Work/Hygienic/Maintenance Practices:</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical States:</b>	[ ] Gas    [ X ] Liquid    [ ] Solid		
<b>Appearance and Odor:</b>	Appearance: Clear to slightly hazy. Yellow-green. Liquid. Odor: Slight. chlorine-surfactant type.		
<b>pH:</b>	pH: 12.0 - 13.0 (1% Solution) > 13.0		
<b>Melting Point:</b>	< 32.00 F		
<b>Boiling Point:</b>	> 212.00 F		
<b>Flash Pt:</b>	NA    Method Used: Not Applicable		
<b>Evaporation Rate:</b>	NA		
<b>Flammability (solid, gas):</b>	No data available.		
<b>Explosive Limits:</b>	LEL: No data.		UEL: No data.
<b>Vapor Pressure (vs. Air or mm Hg):</b>	NA		
<b>Vapor Density (vs. Air = 1):</b>	NA		
<b>Specific Gravity (Water = 1):</b>	~ 1.244    at 20.0 C		
<b>Density:</b>	~ 10.4 LB/GA		
<b>Bulk density:</b>	NA		
<b>Solubility in Water:</b>	Complete		
<b>Saturated Vapor Concentration:</b>	NA		
<b>Octanol/Water Partition Coefficient:</b>	No data.		
<b>Percent Volatile:</b>	~ 66 %		
<b>VOC / Volume:</b>	NA		
<b>HAP / Volume:</b>	NA		
<b>Autoignition Pt:</b>	NA		
<b>Decomposition Temperature:</b>	NA		
<b>Viscosity:</b>	NA		
<b>Particle Size:</b>	NA		
<b>Heat Value:</b>	NA		
<b>Corrosion Rate:</b>	NA		

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, chloride fumes, dense irritating smoke, and oxides of: sulfur, nitrogen, potassium, sodium, Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.
<b>Stability:</b>	Unstable [ ] Stable [ X ]
<b>Conditions To Avoid - Instability:</b>	High temperatures, Ignition sources, Incompatible materials.
<b>Incompatibility - Materials To Avoid:</b>	Acids, Strong oxidizers, Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.
<b>Hazardous Decomposition or Byproducts:</b>	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, chloride fumes, dense irritating smoke, and oxides of: sulfur, nitrogen, potassium, sodium.
<b>Possibility of Hazardous Reactions:</b>	Will occur [ ] Will not occur [ X ]
<b>Conditions To Avoid - Hazardous Reactions:</b>	No data available.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicological Information:</b>	<p>Epidemiology: No information available.  Teratogenicity: No information available.  Reproductive Effects: No information available.  Mutagenicity: No information available.  Neurotoxicity: No information available.  Other Studies: CAS# 1310-58-3:  Acute toxicity, LD50, Oral, Rat, 273 mg/kg</p> <p>Other Studies: CAS# 1643-20-5:  Acute toxicity, LD50, Dermal, Rabbit: &gt; 2000 mg/kg  Acute toxicity, LD50, Oral, Rat: 1064 mg/kg</p> <p>Other Studies: CAS# 7681-52-9:  Acute toxicity, LD50, Oral, Mouse, 5800 mg/kg</p>
<b>Irritation or Corrosion:</b>	<p>Other Studies: CAS# 1310-58-3:  Standard Draize Test, Skin, Species: Rabbit, 50.0 mg, 24H</p> <p>Other Studies: CAS# 7681-52-9:  Standard Draize Test, Eyes, Species: Rabbit, 1.310 mg</p>
<b>Carcinogenicity:</b>	NTP? No IARC Monographs? No OSHA Regulated? No

## 12. ECOLOGICAL INFORMATION

<b>General Ecological Information:</b>	<p>Environmental: No information found.  Physical: No information found.  Other: No information available.</p>
<b>Results of PBT and vPvB assessment:</b>	<p>Other Studies: CAS# 1310-58-3:  LC50, Western Mosquitofish (Gambusia affinis), adult(s), 80000 ug/L, 96H, Mortality</p> <p>Other Studies: CAS# 1643-20-5:  LC50, Fish, 2.67 mg/L, 96H, Mortality</p> <p>Other Studies: CAS# 7681-52-9:</p>

LC50, Rainbow trout (*Oncorhynchus mykiss*), 59.00 ug/L, 96H  
 LC50, Water Flea (*Daphnia magna*), 32.00 ug/L, 48H  
 LC50, Bleak (*Alburnus alburnus*), 30000 - 35000 ug/L, 96H

**Persistence and Degradability:** No data available.  
**Bioaccumulative Potential:** No data available.  
**Mobility in Soil:** No data available.

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.

**Waste Disposal Method:** D002

### 14. TRANSPORT INFORMATION

#### LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** Corrosive liquid, basic, inorganic, n.o.s. (Potassium Hydroxide, Sodium Hypochlorite)  
**DOT Hazard Class:** 8 CORROSIVE  
**UN/NA Number:** UN3266 **Packing Group:** II



### 15. REGULATORY INFORMATION

#### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1310-58-3	Potassium hydroxide	No	Yes 1000 LB	No
1643-20-5	Dodecyldimethylamine oxide	No	No	No
7681-52-9	Sodium hypochlorite	No	Yes 100 LB	No

#### This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Explosive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Acute toxicity (any route of exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Flammable (gases, aerosols, liquid, or solid)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Skin Corrosion or Irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Oxidizer (liquid, solid or gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Serious eye damage or eye irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Self-reactive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Respiratory or Skin Sensitization
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pyrophoric (liquid or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Germ cell mutagenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pyrophoric gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Carcinogenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Self-heating	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reproductive toxicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Organic peroxide	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specific target organ toxicity (single or repeated exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Corrosive to metal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Aspiration Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Gas under pressure (compressed gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Simple Asphyxiant
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No In contact with water emits flammable gas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Health) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Combustible Dust	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Physical) Hazard Not Otherwise Classified (HNOC)	

CAS #	Hazardous Components (Chemical Name)
1310-58-3	Potassium hydroxide
1643-20-5	Dodecyldimethylamine oxide
7681-52-9	Sodium hypochlorite

#### Other US EPA or State Lists

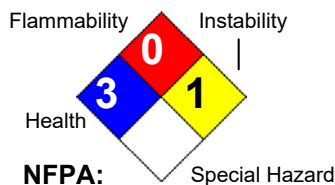
TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8  
 TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No  
 TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8



## 16. OTHER INFORMATION

**Revision Date:** 06/10/2020

**Hazard Rating System:**



**Additional Information About** No data available.

**This Product:**

**Company Policy or**

**Disclaimer:**

Information presented herein is believed to be accurate and reliable to the best of our knowledge. However, we make no warranty or merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process. Users should make their own investigations to determine the suitability of the information for their particular purposes.

# IN-FACT 304

(Formerly Foam Cleaner 3040)  
CHLORINATED FOAM CLEANER

SAME  
TRUSTED  
FORMULA

## DANGER

Causes severe skin burns and eye damage.  
Toxic to aquatic life.



**Precautionary Statements:** Do not breathe mist/vapors/spray. Wear protective gloves, protective clothing, eye protection, and face protection. Wash hands thoroughly after handling. Avoid release to the environment.

## First Aid:

IF ON SKIN (or hair): Immediately remove all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or a doctor.

SPECIFIC TREATMENT: See Section 4 of the SDS to reference supplemental first aid instruction if immediate measures are required.

**Storage/Disposal:** Dispose of contents and containers in accordance with local, regional, national, and international regulations.

**Supplemental Information:** This product may be fatal if swallowed in large amounts. Take proper precautions, especially when using this product in an enclosed or semi-enclosed area. At elevated temperatures, this product may react with the reducing sugars in foods and beverages to produce toxic carbon monoxide. When entering a tank, even an empty one, follow all appropriate confined entry procedures (ANSI Z117.1).

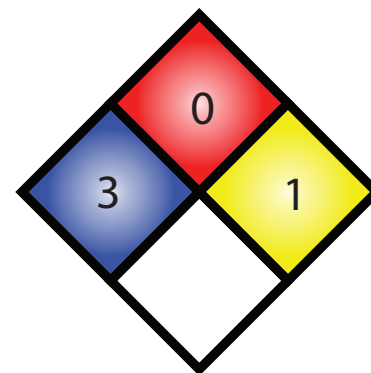
KEEP OUT OF REACH OF CHILDREN.



SHEPARD BROS., INC.  
503 S. CYPRESS ST.  
La Habra, CA 90631 • (562) 697-1366

CONTAINS: POTASSIUM HYDROXIDE, SODIUM HYPOCHLORITE.  
DO NOT ALLOW CONTACT WITH ACIDS OR ALUMINUM, ZINC,  
OR MAGNESIUM METALS.

Contact your Shepard Bros., Inc. representative for more specific use instructions and recommended dispensing equipment.



Read safety data sheets for more detailed information.

PROPER SHIPPING NAME:

UN3266,  
CORROSIVE LIQUID, BASIC, INORGANIC,  
N.O.S. (POTASSIUM HYDROXIDE, SODIUM  
HYPOCHLORITE), 8, PGII

PRODUCT ID:

BATCH NO.:

NET CONTENTS:



**SHEPARD Bros. Inc.**

Cleaners / Sanitizers / Water Treatment

503 S. Cypress St., La Habra, CA 90631

phone: 562/697-1366

fax: 562/697-5786

January 1, 2020

Based on current U.S. Food and Drug Administration Guidelines, this Letter of Guarantee certifies that the Shepard Bros., Inc. product, **In-Fact 304**, is safe and suitable as a general cleaning agent on all surfaces or for use with steam or mechanical cleaning devices in all departments of establishments processing food for human or animal consumption.

When used according to the product label directions and in accordance with Good Manufacturing Practice this product will have no deleterious effects on the foods being processed.

This product must be used, handled and stored in a manner that will not adulterate food products. Before using this compound, food products and packaging materials must be removed from the room or carefully protected. After using this compound, surfaces must be thoroughly rinsed with potable water. This product must always be used according to applicable label directions.

Sincerely,

Jose Arias  
Environmental, Health, Safety, and  
Compliance Manager  
Shepard Bros., Inc.



SHEPARD BROS.

Shepard Bros., Inc.  
503 S. Cypress St.  
La Habra, CA 90631  
(562) 697-1366

**In-Fact 304**  
Chlorinated Cleaner Test Kit  
**SBRTK5000-Z**

1. Rinse test tube (0701) 3 times with sample. Fill to 5 or 10 mL.
2. Add 5 drops of Sodium Thiosulfate 0.0365N (ST2970), and mix.
3. Add 3 drops of Phenolphthalein indicator (PH1605), mix (solution will turn pink).
4. Add Sulfuric Acid 1.0 N (SA1625) drop-wise while swirling until the sample color turns clear.  
Count the number of drops. Hold bottle vertically.

5. Calculations:

**For 5 mL sample: 1 drop = 320 ppm alkalinity as sodium hydroxide (by weight)**

number of drops x 320 = to obtain ppm active alkalinity as Sodium Hydroxide (by weight)

number of drops x 448.8 = to obtain ppm active alkalinity as Potassium Hydroxide (by weight)

number of drops x 0.25 = to obtain % product in solution (by volume)

number of drops x 0.334 = to obtain fl oz product/gallon

number of drops x 2500 to obtain ppm product in solution (by vol)

**Example:** 5.0 fl-oz/gal = 15 drops

1.0 fl-oz/ gal = 3 drops

1% product in solution by volume = 4 drops

**For 10 mL sample: 1 drop = 160 ppm alkalinity as sodium hydroxide (by weight)**

number of drops x 160 = to obtain ppm active alkalinity as Sodium Hydroxide (by weight)

number of drops x 224.4 = to obtain ppm active alkalinity as Potassium Hydroxide (by weight)

number of drops x 0.143 = to obtain % product in solution (by volume)

number of drops x 0.2 = to obtain fl oz product/gallon

number of drops x 1430 to obtain ppm product in solution (by vol)

**Example:** 5.0 fl-oz/gal = 25 drops

1.0 fl-oz/ gal = 5 drops

1% product in solution by volume = 7 drops

**NOTE:** For accuracy and consistency hold the dropper bottle in a vertical position during the titration.