

Safety Data Sheet

Issued Date: June 29, 2015

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Version 1

1. IDENTIFICATION

Product Identifier

Product Name F-702 Liquid Laundry Sour

Other means of identification

Product Code F-702

Recommended use of the chemical and restrictions on use

Recommended Use Use in washing machines to bring down the alkalinity.

Details of the supplier of the safety data sheet

Missouri Vocational Enterprises
2727 Highway K
Bonne Terre, MO 63628
Phone: (573) 358-5516

Emergency Telephone Number

INFOTRAC 1-800-535-5053 (North America)
1-352-323-3500 (International)

2. HAZARDOUS IDENTIFICATION

Signal Word DANGER

Classification	Hazard Category
Skin corrosion/irritation	2
Serious eye damage/eye irritation	2A
Specific target organ toxicity, single exposure	3

Health Hazard Statement(s)

H314 – Causes severe skin burns and eye damage.
H335 – May cause respiratory irritation.

H318 – Causes serious eye damage.

Hazard Pictogram(s)



Hazard Ratings

	HMIS	NFPA
Health	3	3
Flammability	0	0
Reactivity	0	0
PPE	H	N/A

Precautionary Statement(s)

P210 – Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P233 – Keep container tightly closed.
P240 – Ground/bond container and receiving equipment.
P260 – Do not breathe dust/fume/gas/mist/vapor/spray.
P264 – Wash face, hands and any exposed skin thoroughly after handling.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear protective gloves/protective clothing/ eye protection/face protection.
P301+P330+P331 – IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
P303+P361+P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 – Specific treatment (see this label).

P332+P313 – If skin irritation occurs: Get medical advice/attention.

P337+P313 – If eye irritation persists: Get medical advice/attention.

P362 – Take off contaminated clothing and wash before reuse.

P403+P233 – Store in a well-ventilated place. Keep container tightly closed.

P405 – Store locked up.

P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

Potential Health Effects

Skin Contact	May cause severe skin burns.
Eye Contact	May cause serious eye damage.
Inhalation	May cause respiratory irritation.
Ingestion	May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENT

Chemical Name/Pure Substance	CAS #	Weight-%
Water	7732-18-5	55-60
Phosphoric Acid	7664-38-2	35-45
Citric Acid	77-92-9	0-3

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

General Advice	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. This material is an acid and has irritating effects to mucous membranes.
Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact, lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Skin Contact	Wash area with plenty of soap and water. Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician immediately.
Ingestion	Call a POISON CENTER or doctor/physician immediately. Rinse mouth. Give victim 2-4 glasses of water to drink. Do not induce vomiting.

Most important symptoms and effects

Symptoms	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Special Treatment	If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage. Treat the affected person appropriately.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water fog, foam, dry chemical powder, carbon dioxide (CO₂)

Unsuitable Extinguishing Media: Do not use water jet as extinguisher, as this will spread the fire.

Specific Hazards Arising from the Chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection see section 8 of this SDS.
Environmental precautions	Avoid discharge into drains, water courses, or onto the ground. Large spills may cause pollution.

Methods and material for containment and clean up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean up	Large spills: Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand, or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with large amounts of water. Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

7. HANDLING AND STORAGE

Precautions for safe handling

Keep away from heat, sparks, open flames, and hot surfaces. – No smoking. Avoid contact with skin and eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Use only with adequate ventilation. Wash thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks, and open flames. Keep containers tightly closed in a dry, cool, and well-ventilated place. Store away from incompatible materials (see Section 10 of this SDS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	ACGIH	OSHA	NIOSH
Phosphoric Acid (CAS 7664-38-2)	-	TWA: 1 mg/m ³ , 8 h STEL: 3 mg/m ³	-

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear chemical goggles or a face shield.

Skin and Body Protection	Wear impervious protective gloves and clothing to prevent contact to skin.
Respiratory Protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Wear positive pressure self-contained breathing apparatus (SCBA).
General Hygiene Considerations	Do not eat, drink, or smoke when using this product. Wash contaminated clothing before reuse. Routinely wash work clothing and protective equipment to remove contaminants. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Liquid	Odor	Odorless
Color	Clear	Odor Threshold	Not Determined
Property	Values	Remarks - Method	
pH	1.5-2.5	1% solution	
Melting Point/Freezing Point	Not available		
Boiling Point/Boiling Range	Not available		
Flash Point	Non combustible		
Evaporation Rate	Not available		
Flammability (Solid, Gas)	Liquid- Not applicable		
Upper Flammability Limits	Not available		
Lower Flammability Limits	Not available		
Vapor Pressure	Not available		
Vapor Density	Not available		
Specific Gravity	1.22		
Water Solubility	Complete		
Solubility in other solvents	Not available		
Partition Coefficient	Not available		
Auto-ignition Temperature	Not available		
Decomposition Temperature	Not available		
Viscosity	Not available		
Explosive Properties	Not available		
Oxidizing Properties	Not available		

10. STABILITY AND REACTIVITY

Reactivity	Not reactive under normal conditions.
Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Avoid contact with metals (such as mild steel and aluminum), which may liberate flammable hydrogen gas that can produce an explosion in confined vessels. Be cautious when mixing with strong bases because the high heat of reaction can generate steam.
Hazardous Decomposition Products	Phosphorous oxides may form when heated to decomposition.
Hazardous Polymerization	No dangerous reaction known under conditions of normal use.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact	May cause serious eye damage.
Skin contact	May cause severe skin burns.
Ingestion	Harmful if swallowed.
Inhalation	May cause respiratory irritation.

Symptoms related to the physical, chemical, and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage.

Carcinogenicity

Not considered to be a carcinogen.

Reproductive toxicity

Not expected to cause reproductive harm.

Acute toxicity

Toxic if swallowed.

Product	Dermal LD50	Inhalation LC50	Oral LD50
Phosphoric Acid 80% (CAS 7664-38-2)	>3,160 mg/kg (Rabbit)	-	4,200 mg/kg (Rat)
Citric Acid (CAS 77-92-9)	42 mg/kg (Mouse) 330 mg/kg (Rabbit) 883 mg/kg (Rat)	-	5040 mg/kg (Mouse) 6730 mg/kg (Rat)

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitization

Not expected to cause respiratory or skin sensitization.

Germ cell mutagenicity

No data to indicate any mutagenicity or genotoxicity.

Specific target organ toxicity

Not available.

12. ECOLOGICAL INFORMATION

Ectotoxicity

Practically non-toxic, but does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Fish
Phosphoric Acid (CAS 7664-38-2)	138 mg/L, 96 h LC50 Mosquitofish

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Other adverse effects

No other adverse environmental effects are expected from this product.

13. DISPOSAL CONSIDERATIONS

Disposal Instructions

Collect and reclaim or dispose in sealed containers at a licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Dispose of in accordance with local, state, and federal regulations.

Hazardous Waste Code

D002

Waste from residues / unused products

Best demonstrated available treatment (BDAT) for D002 materials is deactivation. Dispose of in accordance with local, state, and federal regulations.

Contaminated Packaging

Packaging could contain residues from the material. Dispose of in accordance with local, state, and federal regulations.

16. OTHER INFORMATION**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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