

Sunbow Liquidet FX-9



Technical Dossier

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S H E P A R D B R O S . I N C .

SUNBOW LIQUIDET FX-9

PREMIUM LAUNDRY DETERGENT

PRODUCT DESCRIPTION

SUNBOW LIQUIDET FX-9 is a premium concentrated liquid detergent that can be used for all soil classifications. This premium product incorporates complex surfactants that are designed to be equally effective on removing particulate soils as on oil and grease.

PROPERTIES AND BENEFITS

- Solvents specifically designed to aid oil and grease removal.
- Powerful surfactants quickly penetrate soils and emulsify oil and grease to reduce wash time. Especially effective on oily and greasy soils like lipstick, cosmetics, cooking oils and salad dressings.
- Optical brightener for whiter whites and brighter colors.
- Contains chelating agents and is effective in hard water conditions.
- Designed to be used with either liquid injection equipment or manual addition.
- Pleasant citrus fragrance and blue color to easily identify and differentiate from other products.
- Fortified with water conditioners and soil suspending polymers to eliminate the need for multiple products in hard water environments.
- Slightly elevated pH to eliminate dye transfer when used without an alkali.

DIRECTIONS

Use 2-6 oz/cwt for normal soil load.

Your Shepard Bros. representative can recommend specific use instructions and recommended dispensing equipment which will depend on your operating conditions.

SAFE HANDLING

Caution: contact with water, acid or moist air liberates irritating gas.
Severe skin & eye irritant.

(Rev. 03/17)

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.

A Safety Data Sheet containing detailed information regarding the properties and safe handling of **SUNBOW LIQUIDET FX-9** is available on request and should be reviewed prior to using this product

(Rev. 03/17)

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Shepard Bros., Inc.

503 S. Cypress St. La Habra, CA 90631

(800) 645-3594

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code:	SN/LDFX9		
Product Name:	Liquidet FX-9		
Company Name:	Shepard Bros., Inc. 503 S. Cypress St. La Habra, CA 90631	Phone Number:	+1 (562)697-1366
Web site address:	www.shepardbros.com		
Emergency Contact:	CHEMTREC		+1 (800)424-9300
Product Category:	Detergent/Cleaner		

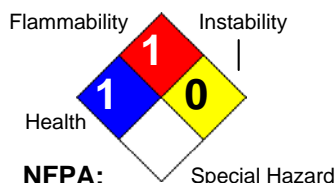
2. HAZARDS IDENTIFICATION

Flammable Liquids, Category 3
 Skin Corrosion/Irritation, Category 3
 Skin Sensitization, Category 1
 Aquatic Toxicity (Acute), Category 3
 Aquatic Toxicity (Chronic), Category 3



GHS Signal Word:	Warning
GHS Hazard Phrases:	H226 - Flammable liquid and vapor. H316 - Causes mild skin irritation. H317 - May cause an allergic skin reaction. H402 - Harmful to aquatic life. H412 - Harmful to aquatic life with long lasting effects.
GHS Precaution Phrases:	P233 - Keep container tightly closed. P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P240 - Ground/bond container and receiving equipment. P241 - Use explosion-proof electrical/ventilating/lighting/.../ equipment. P243 - Take precautionary measures against static discharge. P242 - Use only non-sparking tools. P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. P272 - Contaminated work clothing should not be allowed out of the workplace. P362+364 - Take off contaminated clothing and wash it before reuse. P273 - Avoid release to the environment.
GHS Response Phrases:	P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P332+313 - If skin irritation occurs, get medical advice/attention. P321 - Specific treatment see Section 4 reference to supplemental first aid instruction - if immediate measures are required.
GHS Storage and Disposal Phrases:	P403+235 - Store in cool/well-ventilated place. P501 - Dispose of contents/containers in accordance with local/regional/national/international regulations.

Hazard Rating System:



Potential Health Effects (Acute and Chronic):

Chronic: In 2-year gavage studies, there was clear evidence of carcinogenic activity of d-limonene for male rats, as shown by increased incidences of tubular cell hyperplasia, adenomas, and adenocarcinomas of the kidney. There was NO evidence of carcinogenic activity of d-limonene for female rats, for male mice, or for female mice.

Inhalation:

May cause irritation to mucous membranes.

Skin Contact:

May cause skin irritation. May cause an allergic skin reaction.

Eye Contact:

May cause irritation, redness, stinging, tearing, and swelling.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
5989-27-5	Limonene	<2.00 %

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. 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 aid if irritation develops or persists.

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 aid if irritation develops or persists.

In Case of Ingestion:

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

Note to Physician:

Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

5. FIRE FIGHTING MEASURES

Flash Pt: > 212 F (100 C) Method Used: Pensky-Marten Closed Cup

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

Autoignition Pt: NA

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate 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. Containers can build up pressure if exposed to heat (fire). 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, and oxides of: phosphorus, sulfur, potassium.



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Supersedes Revision: 01/18/2014

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:	Spills/Leaks: 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). Contain spill using an inert diking material. Transfer material into an approved container for possible recovery and reuse or for disposal.

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. Keep away from heat, sparks and flame. Do not store in direct sunlight. Store away from strong oxidizing agents. Store in a tightly closed container. Keep container closed when not in use. Protect containers against damage.
Other Precautions:	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
5989-27-5	Limonene	No data.	No data.	No data.
Respiratory Equipment (Specify Type):	If good general or exhaust ventilation is maintained, none required. If vapor concentration exceeds TLV, use NIOSH approved respirator with an organic vapor cartridge. When vapor levels are unknown, use a self-contained breathing apparatus.			
Eye Protection:	Chemical splash goggles or full-face shield.			
Protective Gloves:	Wear appropriate protective gloves to prevent skin exposure. Solvent resistant gloves, Neoprene gloves. nitrile gloves.			
Other Protective Clothing:	Wear appropriate protective clothing to prevent skin exposure. Chemical resistant apron. Rubber or neoprene boots.			
Engineering Controls (Ventilation etc.):	Local exhaust is usually adequate. Mechanical ventilation should be used when spraying in enclosed areas. Vapor concentration should be minimized as much as possible. Facilities storing or utilizing this material should be equipped with an eyewash facility, and a safety shower is recommended.			
Work/Hygienic/Maintenance Practices:	Handle in accordance with good industrial hygiene and safety practice.			



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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[] Gas [X] Liquid [] Solid	
Appearance and Odor:	Appearance: Transparent. Blue. Liquid. Odor: Mild citrus.	
Melting Point:	< 32.0 F (0 C)	
Boiling Point:	> 212 F (100 C)	
Decomposition Temperature:	NA	
Autoignition Pt:	NA	
Flash Pt:	> 212 F (100 C) Method Used: Pensky-Marten Closed Cup	
Explosive Limits:	LEL: No data.	UEL: No data.
Specific Gravity (Water = 1):	1.03	
Density:	NA	
Bulk density:	NA	
Vapor Pressure (vs. Air or mm Hg):	NA	
Vapor Density (vs. Air = 1):	NA	
Evaporation Rate:	NA	
Solubility in Water:	Complete	
Saturated Vapor Concentration:	NA	
Viscosity:	NA	
pH:	NA	
Percent Volatile:	NA	
VOC / Volume:	NA	
Particle Size:	NA	
Heat Value:	NA	
Corrosion Rate:	NA	

10. STABILITY AND REACTIVITY

Reactivity:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: phosphorus, sulfur, potassium.
Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	High temperatures, Ignition sources, Incompatible materials.
Incompatibility - Materials To Avoid:	Acids, Strong oxidizing agents, Strong reducing agents.
Hazardous Decomposition Or Byproducts:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: phosphorus, sulfur, potassium.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.



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11. TOXICOLOGICAL INFORMATION

Toxicological Information:	Epidemiology: No information available. Teratogenicity: No information available. Reproductive Effects: No data available. Mutagenicity: No information available. Neurotoxicity: No data available.
	Other Studies: CAS# 5989-27-5: Acute toxicity, LD50, Oral, Rat, 4400 mg/kg Acute toxicity, LD50, Skin, Rabbit, 5gm/kg.
Carcinogenicity/Other Information:	CAS# 5989-27-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information:	Environmental: No data available. Physical: No information available. Other: Dipentene, which is optically inactive limonene, is a marine pollutant.
Results of PBT and vPvB assessment:	Other Studies: CAS# 5989-27-5: LC50, Water Flea (Daphnia magna), 577 ug/L, 48H, Mortality LC50, Fathead Minnow (Pimephales promelas), 600 - 800 ug/L, 24H, Mortality
Persistence and Degradability:	Limonene can be readily degraded in soil.
Bioaccumulative Potential:	May bioconcentrate in aquatic organisms and fish.
Mobility in Soil:	Has low mobility in soil and may rapidly volatilize in the atmosphere.

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. RCRA P-Series: None listed. RCRA U-Series: None listed.
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14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.
DOT Hazard Class:
UN/NA Number:



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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)
5989-27-5	Limonene	No	No	No

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists

5989-27-5 Limonene TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No

Regulatory Information: PROPOSITION 65 (Chemicals known to the state of California to cause cancer or reproductive toxicity): This product may contain traces of: ethylene oxide (CAS 75-21-8).

16. OTHER INFORMATION

Revision Date: 08/13/2014

Additional Information About This Product: No data available.

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.

LIQUIDET FX-9

DETERGENT



WARNING

Flammable liquid and vapor.

Causes mild skin irritation.

May cause an allergic skin reaction.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

Precautionary Statements: Avoid breathing mist/vapors/spray. Wear protective gloves, protective clothing, eye protection, and face protection. Keep container tightly closed. Keep away from heat, sparks, open flames, hot surfaces - No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash it before reuse. Avoid release to the environment.

Response Phrases:

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

If skin irritation occurs, get medical advice/attention.

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

Storage/Disposal: Store in a cool, well-ventilated place. Dispose of contents and containers in accordance with local, regional, national, and international regulations.

FOR INDUSTRIAL USE ONLY.

KEEP OUT OF REACH OF CHILDREN.

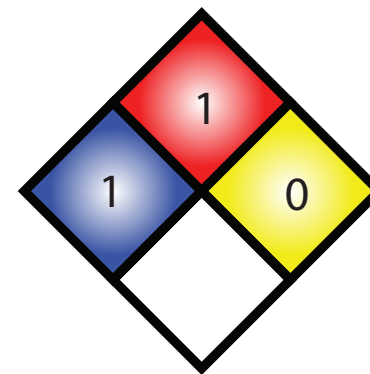


SHEPARD BROS., INC.
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La Habra, CA 90631 • (562) 697-1366



CONTAINS: D-LIMONENE. DO NOT STORE IN DIRECT SUNLIGHT.

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



Read safety data sheets for more detailed information.

24 HR. EMERGENCY PHONE: 800-424-9300 (CHEMTREC)

PROPER SHIPPING NAME: NOT REGULATED

PRODUCT ID:

BATCH NO.:

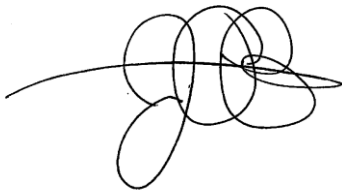
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January 1, 2020

Based on current U.S. Food and Drug Administration Guidelines, this Letter of Guarantee certifies that the Shepard Bros., Inc. product, **Sunbow Liquid-det FX-9**, is safe and suitable as a laundry compound for uniforms or other fabrics which do not come in direct contact with food products.

This product must be used, handled and stored in a manner that will not adulterate food products. This product must always be used according to applicable label directions.

Sincerely,



Jose Arias
Director of Compliance & Regulatory Affairs
Shepard Bros., Inc.