

**UNITED LABORATORIES INTERNATIONAL LLC
MATERIAL SAFETY DATA SHEET**

K-17

Revised: April 18, 2014

Revision Number: 1

1. Company and Product Identification

Trade Name:	K-17
Application:	Biodegradable solvent and surfactant system
Manufacturer/Supplier:	United Laboratories International, LLC 12600 North Featherwood Drive Suite 330 Houston, Texas 77034 Phone: (832) 775-1600 Fax: (713) 672-3988
Emergency Contact:	Chemtrec: (352) 323-3500
Prepared By:	Technical Specialist: (832) 775-1600

2. Composition/Information on Ingredients

All chemicals are considered non-hazardous according to California Proposition 65, are non-hazardous according to OSHA 29 CFR 1910.1200, and are not reportable under SARA III Section 313; unless otherwise noted below.

<u>Component</u>	<u>CAS #</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
Fatty Acid Methyl Ester	Proprietary	20-40		
Oxygenated Solvent	Proprietary	20-40		
N-Methyl Pyrrolidinone	872-50-4	20-40		
Cationic Surfactant	Proprietary	5 - 15		

3. Hazard Identification

Emergency Overview: Prolonged exposure may cause irritation to the skin and eyes. Wash affected areas with soap and water.

Routes of Exposure:

- **Eyes:** May cause redness, irritation, tearing.
- **Skin:** May cause irritation and defatting, and may lead to mild dermatitis.
- **Inhalation:** No affect from routine use. When heated, vapors may form which may cause irritation to the respiratory system, dizziness, and nausea.
- **Ingestion:** Not likely to be toxic by ingestion. May cause irritation to the mouth, esophagus, and stomach. May cause nausea, dizziness, vomiting, and diarrhea.

HMIS	
K-17	
Health	2
Flammability	1
Physical Hazard	0
PPE	B

Chronic Exposure: Repeated exposure through any route may cause symptoms similar to acute toxicity.

Special Precautions: No additional information is available on whether overexposure to this material would aggravate other existing special medical conditions.

4. First Aid Measures

Eye Contact: Flush with water for at least 20 minutes, occasionally lifting upper and lower eyelids. Seek medical attention immediately.

Skin Contact: Flush affected area with plenty of water for at least 20 minutes. Remove contaminated clothing and/or footwear. Wash contaminated clothing and/or footwear before reuse. Seek medical attention if irritation persists.

Ingestion: Do not give liquids and do not induce vomiting. Never give anything via mouth to an unconscious person. Seek medical attention immediately.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration if necessary. If breathing is difficult, give oxygen. Seek medical attention immediately.

Special Precautions: Not available.

5. Fire Fighting Measures

Fire: This product is Class IIIA combustible liquid per OSHA Hazard Communication Standard.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Use any means for extinguishing surrounding fires.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved SCBA with full face-piece operated in the pressure demand or positive pressure mode.

6. Accidental Release Measures

Spill or Leak: Ventilate the area of the leak or spill. Wear protective equipment as specified in Section 8. Do not flush small or bulk releases to sewer or release into waterways.

- **Small Spill or Leak:** Collect in an appropriate container or absorb with an inert material (i.e., vermiculite, dry sand, diatomaceous earth) and place in a chemical waste container. Do not use combustible materials, such as saw dust.
- **Large Spill or Leak:** For containment, dike far ahead of spill. Cover with inert material (i.e., vermiculite, dry sand, diatomaceous earth) and place material in an approved chemical waste container. Do not use combustible materials, such as saw dust.

Regulatory Requirements: U.S. Regulations (CERCLA) require reporting spills and/or releases to soil, water, and air in excess of reportable quantities. The toll free number for the U.S. Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage

Keep in a tightly closed container. Do not store in plastic or polymeric containers. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat and incompatibilities. Protect from freezing. Observe all warnings and precautions listed for this product.

8. Exposure Control/Personal Protection

Skin Protection: Wear protective clothing such as boots, gloves, lab coat, apron, or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Per eye and face protection regulations (29 CFR 1910.133), use chemical safety glasses/goggles or full face shield where dusting or splashing of solutions is possible.

Ventilation: Provide local or general exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (see below.)

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and if necessary, wear a MSHA/NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks) wear a SCBA. Warning! Air purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and sanitary storage.

Contaminated Clothing: Separate contaminated clothing from non-contaminated clothing. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Engineering Controls: Not applicable

OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
TWA	STEL	TWA	STEL	TWA	STEL	IDLH
-	-	-	-	-	-	-

9. Physical and Chemical Properties

Physical State: Liquid

Color: Yellow to Amber

Odor: Slight

Solubility in Water: Miscible

Specific Gravity (at 70° F): 0.976

Density (lbs/gal): 8.13

pH (1% solution): ca. 7

Boiling Point: ≥400F

Melting Point: Not determined

Flash Point: ≥199F

Vapor Density (Air=1): Not determined

Vapor Pressure (mmHg at 70°F): Not determined.

Evaporation Rate (BuAc=1): Not determined.

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage. Do not store in plastic or EE/PE polymeric containers.

Hazardous Decomposition Products: Oxides of nitrogen and carbon.

Polymerization: No hazardous polymerization will occur.

Incompatibilities: Strong oxidizers such as nitrates, chlorates, and peroxides.

Conditions to Avoid: Extreme heat, flames, ignition sources, and incompatibles.

11. Toxicological Information

K-17:

- LD₅₀ Rat, Oral: 3914 mg/kg
- LD₅₀ Rabbit, Dermal: 8000 mg/kg
- NTP Carcinogen:
 - Known: No
 - Anticipated: No
- IARC Category: None

12. Ecological Information

K-17 Formulation:

- Environmental Fate: Biodegradable.

N-Methyl Pyrrolidinone:

- Aquatic Toxicity:
 - EC₅₀ 96 hour, Rainbow Trout (*Oncorhynchus mykiss*): >500 mg/L
 - EC₅₀ 24 hour, Daphnia magna: >1000 mg/L
 - EC₅₀ 72 hour, Algae (*Scenedesmus subspicatus*): >500 mg/L
 - EC₅₀ 48 hour, Bacteria (*Pseudomonas putida*): >9000 mg/L

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use, or contamination of this product may change the waste management options. Always dispose of in accordance with local, state, and federal regulations. Recommend puncturing or crushing of containers to prevent unauthorized use of used containers.

This product as produced is not specifically listed as an EPA RCRA hazardous waste according to federal regulations (40 CFR 261). However, when discarded or disposed of, it may meet the criteria of a "characteristic" hazardous waste. This material could become a hazardous waste if mixed or contaminated with a hazardous waste or other substance(s). It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations.

14. Transport Information

Domestic (Land, D.O.T.): Not restricted. Not a DOT controlled material (United States).

International (Water, I.M.O.): Not restricted.

15. Regulatory Information

Chemical Inventory Status – Section 1				
Ingredient	TSCA	EC	Japan	Australia
K-17	Yes	Yes	Yes	Yes

Chemical Inventory Status – Section 2				
Ingredient	Korea	Canada DSL	Canada NDSL	Phil.
K-17	Yes	Yes	No	Yes

Federal, State & International Regulations – Section 1				
Ingredient	SARA 302		SARA 313	
	RQ	TPQ	List	Chem. Catg.
K-17	No	No	Yes	No

Federal, State & International Regulations – Section 2				
Ingredient	CERCLA	RCRA	TSCA	
		261.33	8(d)	12(b)
K-17	No	No	No	Yes

SARA 311/312

Fire: No

Acute: Yes

Chronic: Yes

Pressure: No

Reactivity: No

Chemical Weapons Convention: No

State: Liquid

CDTA: No

Poison Schedule: -

Australian HazChem Code: -

WHMIS: This product has been classified **B3 D2 B** according to the hazard criteria of the CPR (Controlled Products Regulations/WHMIS) and the MSDS contains all the information required by the CPR.

Markings according to EU/ECC guidelines: Irritant.

Code letter and hazard designation: X₁



Germany Water Endangering Classes (WGK): 1

Risk Phrases: R36/38: Irritating to eyes, skin.

Safety Phrases: S37/39: Wear suitable gloves and eye/face protection.

United Laboratories International LLC

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16. Other Information

United Laboratories International, LLC provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. UNITED LABORATORIES INTERNATIONAL, LLC MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, UNITED LABORATORIES INTERNATIONAL, LLC WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.