UNITED LABORATORIES INTERNATIONAL LLC MATERIAL SAFETY DATA SHEET K19

Revised: February 1, 2013 Revision Number: 2

1. Company and Product Identification

Trade Name:

K19

Application:

Hydrogen sulfide neutralizer

Manufacturer/Supplier:

United Laboratories International, LLC 12600 North Featherwood Drive

Suite 330

Houston, Texas 77034 Phone: (281) 443-0300 Fax: (713) 672-3988

Emergency Contact:

Chemtrec: (352) 323-3500

Prepared By:

Chief Technologist: (281) 443-0300

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.

Component	CAS#	<u>%</u>	ACGIH TLV	OSHA PEL
Amine Oxide	Proprietary	30 - 60	-	

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 eye irritation.
- · Skin: May cause skin irritation.
- Inhalation: May cause respiratory tract irritation. May be harmful if inhaled.
- Ingestion: May cause irritation of the digestive tract.

Chronic Exposure: No information found.
Special Precautions: Not available.

0
0
0
В

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: Immediately rinse mouth and drink plenty of water. Do not induce vomiting. 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.

Page 2 of 4 K-19

5. Fire Fighting Measures

Fire: Not considered to be a fire hazard. Flash point > 100C.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

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.

Accidental Release Measures

Spill or Leak: Ventilate the area of the leak or spill. Wear protective equipment as specified in Section 8. Do not empty into drains 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. Pump off product. Cover residues
 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. 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. Product shelf-life is 2 years.

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 control vapors/mist.

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,

OSH	A PEL	ACGI	H TLV	NIOSH REL		NIOSH
TWA	STEL	TWA	STEL	TWA	STEL	IDLH
_	-	-	-	-	-	-

9. Physical and Chemical Properties

Physical State: Liquid Color: Colorless to yellow

Odor: amine-like

Solubility: Soluble in water at all concentrations

Specific Gravity (at 70° F): 1.14

Density (lbs/gal): 9.542 pH (undiluted): ca, 7 - 8 Boiling Point: ca, 212° F Melting Point: ca, -4° F

Vapor Density (Air=1): No information found

Vapor Pressure (mmHg): 17 @ 75F

Evaporation Rate (BuAc=1): No information found

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage. Thermally decomposes above 270F.

Product shelf-life is 2 years under ambient conditions in a sealed nonmetallic container.

Hazardous Decomposition Products: Oxides of nitrogen and carbon.

Polymerization: No hazardous polymerization will occur.

Incompatibilities: Strong oxidizing agents.

Conditions to Avoid: Heat, flames, ignition sources, and incompatibles.

11. Toxicological Information

K19:

LD50, Oral, Rat: 9200 ^{mg}/_{kg}
 LC50, Inhalation, Rat: ND ^{ug}/_m3

- Irritation, Eye, Rabbit (Draize test): non-irritant
- Irritation, Skin, Rabbit (Draize test): non-irritant
- NTP Carcinogen;
 o Known; No
 o Anticipated: No
- IARC Category: None

12. Ecological Information

K19:

Environmental Fate: Poorly biodegradable by non-adapted activated sludge.

(<10% by 28-day OECD 301A).

Biodegradable by adapted activated sludge.

Reaction product is biodegradable. >60% by 28 day OECD 302B.

Aquatic Toxicity:

o LC₅₀ 24 hour, Fish (Golden orfe): >1000 ^{mg}/₁

LC₅₀ 48 hour, Invertebrate (Daphnia magna): >100 ^{mg}/_L

EC₂₀ 30 minute, Activated sludge (OECD 209 aerobic): >1000 ^{mg}/_L

13. Disposal Considerations

Processing, use, or contamination of this product may change the waste management options. Chemical waste generators must determine whether discarded chemical is classified as hazardous waste. Always dispose of in accordance with local, state, and federal regulations. Recommend puncturing or crushing of containers to prevent unauthorized use of used containers.

RCRA P-Series: None listed. RCRA U-Series: None listed.

14. Transport Information

Domestic (Land, US D.O.T., Canada TDG): Not regulated.
International (Water, I.M.O.): Not classified as a dangerous good under transport regulations.

15. Regulatory Information

Chemical Inventory Status - Section 1						
Ingredient	TSCA	EÇ	Japan	Australia		
K19	Yes	Yes	Yes	Yes		

Chemical Inventory Status – Section 2					
Ingredient Korea Canada DSL Canada NDSL Canada TSL					
K19	Yes	Yes	No	No	

Federal, State & International Regulations – Section 1					
Ingredient	\$ARA 302		SARA 313		
	RQ	TPQ	List	Chem. Catg.	
K19	No	No	No	No	

Federal, State & International Regulations – Section 2						
Ingredient	CERCLA	RCRA	TSCA			
		261.33	8(d)	12(b)		
K19	No	No	No	No		

SARA 311/312

Fire: No Acute: No Chronic: No

Pressure: No Reactivity: No

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

European labeling in accordance with EC Directives.

Hazard Symbols: None

German Water Endangering Classes (WGK): 1

Risk Phrases: R36

R36/38 Irritating to eyes, skin.

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

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.