Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name	JACAAB-ETHOMEEN T/15		
Material Uses	: Surfactant.	In Case of Emerge	ency
Supplier/ Repackager	Jacaab LLC 4155 Manchester Avenue St. Louis, MO 63110	CHEMTREC:	800-424-9300
		Information:	314-533-4662

Section 2. Composition, Information on Ingredients

Name	CAS#	% by Weight	
Amines, tallow alkyl, ethoxylated	61791-26-2	98-100	
Amines, tallow alkyl	61790-33-8	0.001-2	
Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-	25322-68-3	0.001-2	

Section 3. Hazards Identification

Physical State Color Odor	Liquid. Amber. Amine like.
Emergency Overview	DANGER! CAUSES EYE BURNS. CAUSES SEVERE SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. HARMFUL TO AQUATIC ORGANISMS. MAY BE HARMFUL TO ENVIRONMENT IF RELEASED IN LARGE AMOUNTS. Do not get in eyes. Do not ingest. Avoid breathing vapor or mist. Avoid contact with skin and clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Avoid contact of spilled material and runoff with soil and surface waterways.
Possible Carcinogenic Effects	Amines, tallow alkyl, ethoxylated: IARC, NTP, OSHA, ACGIH: Not listed. Amines, tallow alkyl: IARC, NTP, OSHA, ACGIH: Not listed. Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-: IARC, NTP, OSHA, ACGIH: Not listed.
Routes of Entry	Absorbed through skin. Dermal contact. Eye contact.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Medical Conditions Aggravated by Overexposure	Repeated or prolonged exposure is not known to aggravate medical condition.

Section 5. Fire Fighting Measures

Flammability of the Product	May be combustible at high temperature.
Auto-ignition Temperature	The lowest known value is >150°C (302°F) (Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-).
Flash Points	Closed cup: >100°C (212°F). (Pensky-Martens.)
Products of Combustion	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂).
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Protective Clothing (Fire)	Be sure to use an approved/certified respirator or equivalent.

Section 6. Accidental Release Measures

Small Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal. If necessary: Use suitable protective equipment (Section 8).
Large Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal. Use suitable protective equipment (Section 8). Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

HandlingDo not ingest. Avoid breathing vapors or spray mists. Avoid contact with skin and clothing. Do not get in
eyes. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Avoid contact of spilled material and runoff with soil and surface waterways.StorageKeep container tightly closed. Keep container in a cool, well-ventilated area.

ETHOMEEN T/15

Section 8. Exposure Controls, Personal Protection

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection Eyes

Eyes	Splash goggles.
Body	Lab coat.
Respiratory	Wear appropriate respirator when ventilation is inadequate.
Hands	Gloves.
Feet	Not applicable.

Protective Clothing (Pictograms)



Personal Protection in Case of a Large Spill

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Ingredient Name

Amines, tallow alkyl, ethoxylated Amines, tallow alkyl Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-

Exposure Limits United States

Not available. Not available. Not available.

Section 9. Physical and Chemical Properties

Physical State	Liquid.
Color	Amber.
Odor	Amine like.
Molecular Weight	Not applicable.
Molecular Formula	Not applicable.
рН	11 to 11.6 [Basic.]
Boiling/Condensation Point	>300°C (572°F)
Melting/Freezing Point	12°C (53.6°F)
Cloud Point	41°C (1% water)
Pour Point	13°C
Density	0.95 g/cm³ (25°C / 77°F)
Vapor Pressure	<0.01 kPa (<0.1 mmHg) (at 20°C)
Vapor Density	The highest known value is >10 (Air = 1) (Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-).
Evaporation Rate	Weighted average: 0.89compared to Butyl acetate.
Solubility	Very slightly soluble in cold water.
Dispersion Properties	Not available.
Physical Chemical Comments	Viscosity = 44.4SSU @ 45C; 40.6SSU @ 55C; 38.8SSU @ 65C; 37.8SSU @ 75C. (Amines, tallow alkyl)

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility with Various Substances	Reactive with OXIDIZING AGENTS, acids.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Toxicity to Animals Ingredient Name or Proc	luct Test	Result	Route	Species
ETHOMEEN® T/15	LD50	1200 to 1500 mg/kg	Oral	Rat
Amines, tallow alkyl	LD50	1950 mg/kg	Oral	Rat
Poly(oxy-1,2-ethanediyl),	LD50	28000 mg/kg	Oral	Rat
a-hydroxy-w-hydroxy-	LD50	31000 mg/kg	Oral	Mouse
	LD50	14000 mg/kg	Oral	Rabbit
	LD50	>20000 mg/kg	Dermal	Rabbit
Special Remarks on ORAL (LD50) based on data for: (similar material) Toxicity to Animals ORAL (LD50) based on data for: (similar material)				
Chronic Effects on Humans	MUTAGENIC EFFECTS : Classified None. for human [Amines, tallow alkyl]. Non-mutagenic for bacteria and/or yeast. [Amines, tallow alkyl].			
Special Remarks on Chronic Effects on Humans	Amines, tallow alkyl : Chromosomal (DNA) abnormalities will not occur in CHO mammalian cell assay, the In Vivo Cytogenetics Assay in mice, the CHO/HGPRT mammalian cell assay and the Mouse Lymphoma Assay; based on a similar material.			
Acute Effects Skin	Severely irritating to the skin. Practically non-toxic in contact with skin.			
Acute Effects Eyes	Corrosive to the eyes.			
Special Remarks on Other Toxic Effects on Humans	Sensitization			

Section 12. Ecological Information

Ecotoxicity Ingredient Name or Proc	luct name Species	Period	Result
Amines, tallow alkyl	Minnows based on data for: (similar material) (LC50)	96 hour(s)	0.11 mg/l
	daphnia based on data for: (similar material) (EC50)	48 hour(s)	0.011 mg/l
	Algae. based on data for: (similar material) (EC50)	72 hour(s)	0.03 mg/l
Poly(oxy-1,2-ethanediyl),	Daphnia (EC50)	48 hour(s)	>10000 mg/l
a-hydroxy-w-hydroxy-	Fish (LC50)	24 hour(s)	>5000 mg/l
Biodegradability and Ecotoxicity Remarks	52% @ 28 day(s) CBT; 62% @ 35 CBT b	eased on data for: (sin	nilar material)
Biodegradable/OECD	Readily biodegradable.		
Products of Degradation	These products are carbon oxides (CO, CO ₂)) and water, nitrogen o	oxides (NO, NO ₂).

Section 13. Disposal Considerations

Waste Information

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Consult your local or regional authorities.

Section 14. Transport Information

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

Section 15. Regulatory Information

HCS Classification	Irritating material				
U.S. Federal Regulations	TSCA: All intentionally present components are listed on the TSCA inventory.				
	DSL: All intentionally present components are listed on the DSL.				
	CERCLA: Hazardous substances.: No products were found.				
	SARA 302/304/311/312 extr SARA 302/304 emergency p SARA 302/304/311/312 haza SARA 311/312 MSDS distrib Immediate (Acute) Health Ha SARA 313 Form R Reporting No products were found.	lanning and notification: No ardous chemicals: ETHOMI oution - chemical inventory - azard	products were found EEN® T/15	ł.	
	SARA 313 Supplier Notificat No products were found.	ion			
State Regulations	No products were found.				
	California prop. 65: No products were found.				
WHMIS (Canada)	Class D-2B: Material causing other toxic effects (TOXIC).				
	CEPA DSL: Amines, tallow alkyl, ethoxylated; Amines, tallow alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-				
	Component	EC Number	EC Status	EC Annex	

ETHOMEEN T/15				Page: 6/6		
European Union	Amines, tallow alkyl, ethoxylated Amines, tallow alkyl Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-	Not available. 263-125-1 Not available.	Not available. Not available. Not available.	Not available. Not available. Not available.		
Other International Lists	Australia (NICNAS): Amines, tallow alkyl, ethoxylated; Amines, tallow alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-					
	Japan (MITI): Amines, tallow alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-					
	Korea (TCCL): Amines, tallow alkyl, ethoxylated; Amines, tallow alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-					
	Philippines (RA6969): Amines, tallow alkyl, ethoxylated; Amines, tallow alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-					

Section 16. Other Information

Hazardous Material Information System (U.S.A.)	Health2Fire Hazard1Reactivity0Personal Protection		National Fire Protection Association (U.S.A.)	Health 2 0 Reactivity Specific Hazard	
			Validation date	05/26/05	
			Phone Number	314-533-4662	

Notice to Reader

The information in the material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable as of the date of publication. However, no warranty is made as to the accuracy of and/or sufficiency of such information and/or suggestions or as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nothing contained herein shall be construed as granting or extending any license under any patent. Buyer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old, call to make certain that this sheet is current.