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Material Safety Data Sheet

MSDS# 15-0432

Section 1. Chemical Product and Company Identification

Product name **ETHOMEEN® C/12**

Material Uses : Surfactant.

In Case of Emergency

Supplier/
Manufacturer AKZO NOBEL SURFACE CHEMISTRY LLC
525 West Van Buren
Chicago, IL 60607-3823

AKZO NOBEL CHEMICALS LTD.
1 City Centre Drive, Suite 318
Mississauga, Ontario L5B 1M2
Canada

CHEMTRIC: 800-424-9300
CANUTEC: 613-996-6666
Medical/Handling: 914-693-6946
Product/Technical: 800-906-9977

Section 2. Composition, Information on Ingredients

Name	CAS #	% by Weight
Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.	61791-31-9	97-100
Amines, coco alkyl	61788-46-3	0.001-3
N-(2-hydroxyethyl)cocoalkylamines	Not Assigned	0.001-3
Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-	25322-68-3	0.001-2

Section 3. Hazards Identification

Physical State Liquid.

Color Colorless to light yellow.

Odor Amine like.

Emergency Overview DANGER!
CAUSES SKIN BURNS.
VERY TOXIC TO AQUATIC ORGANISMS.
CAUSES SEVERE EYE IRRITATION.
MAY BE HARMFUL IF SWALLOWED.
MAY CAUSE ALLERGIC SKIN REACTION.

Do not get on skin or clothing. Avoid contact with eyes. Do not ingest. Avoid breathing vapor or mist. Avoid prolonged or repeated contact with skin. 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 Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.: IARC, NTP, OSHA, ACGIH: Not listed.
Amines, coco alkyl: IARC, NTP, OSHA, ACGIH: Not listed.

N-(2-hydroxyethyl)cocoalkylamines: 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)

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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), α-hydroxy-ω-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).

Section 7. Handling and Storage

Handling	Avoid contact with eyes. Do not ingest. Avoid breathing vapors or spray mists. Avoid prolonged or repeated contact with skin. Do not get on skin or 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.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls, Personal Protection

Engineering Controls	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	Splash goggles.
Body	Lab coat.

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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	Exposure Limits United States
Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.	Not available.
Amines, coco alkyl	Not available.
N-(2-hydroxyethyl)cocoalkylamines	Not available.
Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-	Not available.

Section 9. Physical and Chemical Properties

Physical State	Liquid.
Color	Colorless to light yellow.
Odor	Amine like.
Molecular Weight	Not applicable.
Molecular Formula	Not applicable.
pH	11 [Basic.]
Boiling/Condensation Point	268°C (514.4°F)
Melting/Freezing Point	6°C (42.8°F)
Cloud Point	5°C
Pour Point	8°C
Density	0.899 g/cm³ (32°C / 89.6°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: 0.89 compared to Butyl acetate.
Solubility	Very slightly soluble in cold water.
Dispersion Properties	Not available.
Physical Chemical Comments	Viscosity = 130cp @ 20°C; 75cp @ 30°C; 50cp @ 40°C; 34cp @ 50°C; 25cp @ 60°C; 18cp @ 80°C.

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.

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Section 11. Toxicological Information

Toxicity to Animals

Ingredient Name or Product name	Test	Result	Route	Species
Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.	LD50	6600 mg/kg	Oral	Rat based on data for: (similar material)
Amines, coco alkyl	LD50	1300 mg/kg	Oral	Rat
	LD50	>2000 mg/kg	Dermal	Rabbit
Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-	LD50	28000 mg/kg	Oral	Rat
	LD50	31000 mg/kg	Oral	Mouse
	LD50	14000 mg/kg	Oral	Rabbit
	LD50	>20000 mg/kg	Dermal	Rabbit
Special Remarks on Toxicity to Animals	Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.: INHALATION LC50 = 88 ppm @ 1 hour(s) Rat Amines, coco alkyl: INHALATION LC50 > 0.099 mg/L, 1 hour(s) Rat			
Acute Effects Skin	Corrosive to the skin. May cause sensitization by skin contact. Practically non-toxic in contact with skin.			
Acute Effects Eyes	Severely irritating to the eyes.			
Special Remarks on Other Toxic Effects on Humans	:			

Section 12. Ecological Information

Ecotoxicity

Ingredient Name or Product name	Species	Period	Result
Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.	Fish (LC50)	96 hour(s)	0.28 mg/l
Amines, coco alkyl	daphnia based on data for: (similar material) (EC50)	48 hour(s)	0.032 mg/l
Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-	Daphnia (EC50) Fish (LC50)	48 hour(s) 24 hour(s)	>10000 mg/l >5000 mg/l
Biodegradability and Ecotoxicity Remarks	Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.: 60% @ 28 day(s) CBT based on data for: (similar material) Amines, coco alkyl: 56% @ 28 day(s) CBT 74% @ 42 day(s) CBT Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-: 5% @ 5 day(s) CBT 38% @ 10 day(s) CBT 70% @ 20 day(s) CBT		
Biodegradable/OECD	Readily biodegradable.		
Products of Degradation	These products are carbon oxides (CO, CO ₂) and water, nitrogen 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

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Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
DOT Classification	UN2735	Amines, liquid, corrosive, n.o.s. (Alkoxylated fatty amines)	8 -	III		-
TDG Classification	UN2735	AMINES, LIQUID, CORROSIVE, N.O.S. (Alkoxylated fatty amines)	8 -	III		Special Provisions Classified in Accordance with UN Recomendations
IMDG Class	UN2735	AMINES, LIQUID, CORROSIVE, N.O.S. (Alkoxylated fatty amines)	8 -	III		-
IATA-DGR Class	UN2735	Amines, liquid, corrosive, n.o.s. (Alkoxylated fatty amines)	8 -	III		-

Section 15. Regulatory Information

HCS Classification	Corrosive Material
U.S. Federal Regulations	<p>TSCA: All intentionally present components are listed on the TSCA inventory.</p> <p>DSL: All intentionally present components are listed on the DSL.</p> <p>CERCLA: Hazardous substances.: No products were found.</p> <p>SARA 302/304/311/312 extremely hazardous substances: No products were found.</p> <p>SARA 302/304 emergency planning and notification: No products were found.</p> <p>SARA 302/304/311/312 hazardous chemicals: No products were found.</p> <p>SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.</p> <p>SARA 313 Form R Reporting Requirements</p> <p>No products were found.</p> <p>SARA 313 Supplier Notification</p> <p>No products were found.</p>
State Regulations	<p>No products were found.</p> <p>California prop. 65: No products were found.</p>
WHMIS (Canada)	<p>Class E: Corrosive liquid.</p> <p>CEPA DSL: Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.; Amines, coco alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-</p>

Component	EC Number	EC Status	EC Annex
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European Union	Ethanol, 2,2'-iminobis-, n-coco alkyl derivs. Amines, coco alkyl N-(2-hydroxyethyl)cocoalkylamines Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-	263-163-9 262-977-1 Not available. Not available.	Not available. Not available. Not available. Not available.	Not available. Not available. Not available. Not available.
Other International Lists	Australia (NICNAS): Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.; Amines, coco alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-			
	Japan (MITI): Amines, coco alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-			
	Korea (TCCL): Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.; Amines, coco alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-			
	Philippines (RA6969): Ethanol, 2,2'-iminobis-, n-coco alkyl derivs.; Amines, coco alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-			

Section 16. Other Information**Hazardous Material Information System (U.S.A.)**

Health	3
Fire Hazard	1
Reactivity	0
Personal Protection	J

National Fire Protection Association (U.S.A.)

Other Information Ethomeen® is a registered trademark of Akzo Nobel or affiliated companies and is registered in one or more countries including the United States.

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Validated by

Gabrielle Brite

Previous Validation Date No Previous Validation.

Print Date

12/29/2003.

Phone Number

312-544-7038

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.