

**Material Safety Data Sheet**

MSDS# 15-4436

**Section 1. Chemical Product and Company Identification**

<b>Product name</b>	<b>ETHOMEEN® C/25</b>	
<b>Material Uses</b>	: Surfactant.	<b>In Case of Emergency</b>
<b>Supplier/ Manufacturer</b>	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	CHEMTREC: 800-424-9300 CANUTEC: 613-996-6666 Medical/Handling: 914-693-6946 Product/Technical: 800-906-9977

**Section 2. Composition, Information on Ingredients**

<b>Name</b>	<b>CAS #</b>	<b>% by Weight</b>
Amines, coco alkyl, ethoxylated	61791-14-8	98-100
Amines, coco alkyl	61788-46-3	0.001-2
Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-	25322-68-3	0.001-2

**Section 3. Hazards Identification**

<b>Physical State</b>	Liquid.
<b>Color</b>	Amber.
<b>Odor</b>	Amine like.
<b>Emergency Overview</b>	DANGER! CAUSES EYE BURNS. CAUSES SEVERE SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED.  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.
<b>Possible Carcinogenic Effects</b>	<b>Amines, coco alkyl, ethoxylated:</b> IARC, NTP, OSHA, ACGIH: Not listed. <b>Amines, coco alkyl:</b> IARC, NTP, OSHA, ACGIH: Not listed. <b>Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-:</b> IARC, NTP, OSHA, ACGIH: Not listed.
<b>Routes of Entry</b>	Absorbed through skin. Dermal contact. Eye contact.

See Toxicological Information (section 11)

**Section 4. First Aid Measures**

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

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<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion</b>	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.
<b>Medical Conditions Aggravated by Overexposure</b>	Repeated or prolonged exposure is not known to aggravate medical condition.

## Section 5. Fire Fighting Measures

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

## Section 6. Accidental Release Measures

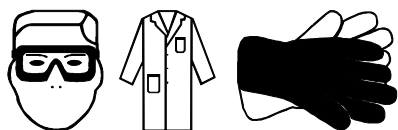
<b>Small Spill and Leak</b>	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: <b>Use suitable protective equipment (Section 8)</b> . Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill and Leak</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal. <b>Use suitable protective equipment (Section 8)</b> . Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## Section 7. Handling and Storage

<b>Handling</b>	Do 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.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area.

## Section 8. Exposure Controls, Personal Protection

<b>Engineering Controls</b>	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.
<b>Personal Protection</b>	
<b>Eyes</b>	Splash goggles.
<b>Body</b>	Lab coat.
<b>Respiratory</b>	Wear appropriate respirator when ventilation is inadequate.
<b>Hands</b>	Gloves.
<b>Feet</b>	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, coco alkyl, ethoxylated  
Amines, coco 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**

<b>Physical State</b>	Liquid.
<b>Color</b>	Amber.
<b>Odor</b>	Amine like.
<b>Molecular Weight</b>	Not applicable.
<b>Molecular Formula</b>	Not applicable.
<b>pH</b>	11 [Basic.]
<b>Boiling/Condensation Point</b>	>300°C (572°F)
<b>Melting/Freezing Point</b>	-6°C (21.2°F)
<b>Cloud Point</b>	-2°C
<b>Pour Point</b>	-4°C
<b>Density</b>	1.038 g/cm <sup>3</sup> (25°C / 77°F)
<b>Vapor Pressure</b>	<0.01 kPa (<0.1 mmHg) (at 20°C)
<b>Vapor Density</b>	The highest known value is >10 (Air = 1) (Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-).
<b>Evaporation Rate</b>	Weighted average: 0.89 compared to Butyl acetate.
<b>Solubility</b>	Partially soluble in cold water.
<b>Dispersion Properties</b>	See solubility in water. Viscosity = 180cp @ 25°C.

**Section 10. Stability and Reactivity**

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

**Section 11. Toxicological Information****Toxicity to Animals**

Ingredient Name or Product name	Test	Result	Route	Species
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Amines, coco alkyl, ethoxylated	LD50	750 mg/kg	Oral	Rat
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**

**Amines, coco alkyl:** INHALATION LC50 > 0.099 mg/L, 1 hour(s) Rat

**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**

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**Section 12. Ecological Information****Ecotoxicity**

Ingredient Name or Product name	Species	Period	Result
ETHOMEEN® C/25	daphnia based on data for: (similar material) (EC50)	48 hour(s)	12 mg/l
	Zebrafish based on data for: (similar material) (LC50)	96 hour(s)	4.31 mg/l
	Bluegill. based on data for: (similar material) (LC50)	96 hour(s)	19.6 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)	48 hour(s)	>10000 mg/l
	Fish (LC50)	24 hour(s)	>5000 mg/l

**Biodegradability and Ecotoxicity Remarks**

45% @ 28 day(s); 50% @ 42 day(s) CBT based on data for: (similar material)

**Biodegradable/OECD**

Inherently biodegradable.

**Products of Degradation**

These products are carbon oxides (CO, CO<sub>2</sub>) and water, nitrogen oxides (NO, NO<sub>2</sub>...).

**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
<b>DOT Classification</b>	Not regulated.	-	-	-		-
<b>TDG Classification</b>	Not regulated.	-	-	-		-
<b>IMDG Class</b>	Not regulated.	-	-	-		-

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<b>IATA-DGR Class</b>	Not regulated.	-	-	-		-

## Section 15. Regulatory Information

**HCS Classification** Corrosive 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 extremely hazardous substances: No products were found.  
 SARA 302/304 emergency planning and notification: No products were found.  
 SARA 302/304/311/312 hazardous chemicals: ETHOMEEN® C/25  
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: ETHOMEEN® C/25:  
 Immediate (Acute) Health Hazard  
 SARA 313 Form R Reporting Requirements  
 No products were found.  
 SARA 313 Supplier Notification  
 No products were found.

**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, coco alkyl, ethoxylated; Amines, coco alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-

<b>European Union</b>	<b>Component</b>	<b>EC Number</b>	<b>EC Status</b>	<b>EC Annex</b>
	Amines, coco alkyl, ethoxylated	Not available.	Not available.	Not available.
	Amines, coco alkyl	262-977-1	Not available.	Not available.
	Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-	Not available.	Not available.	Not available.

**Other International Lists** Australia (NICNAS): Amines, coco alkyl, ethoxylated; Amines, coco alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-  
 China: Amines, coco alkyl, ethoxylated  
 Germany water class: Amines, coco alkyl, ethoxylated  
 Japan (MITI): Amines, coco alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-  
 Korea (TCCL): Amines, coco alkyl, ethoxylated; Amines, coco alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-  
 Philippines (RA6969): Amines, coco alkyl, ethoxylated; Amines, coco alkyl; Poly(oxy-1,2-ethanediyl), a-hydroxy-w-hydroxy-

## Section 16. Other Information

### Hazardous Material Information System (U.S.A.)

Health	2
Fire Hazard	1
Reactivity	0
Personal Protection	

### 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**

**Elitania Carlos**

**Previous Validation Date** No Previous Validation.

**Print Date**

2/19/2004.

**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.