

# Material Safety Data Sheet

MSDS# J00530175\_05262005

## Section 1. Chemical Product and Company Identification

<b>Product name</b>	<b>JACAAB-ARQUAD C-33W</b>		
<b>Material Uses</b>	: Surfactant.	<b>In Case of Emergency</b>	
<b>Supplier/ Repackager</b>	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
Quaternary ammonium compounds, coco alkyl trimethyl, chlorides	61789-18-2	32-35
Water	7732-18-5	65-67
Amines, coco alkyldimethyl	61788-93-0	0.001-2

## Section 3. Hazards Identification

<b>Physical State</b>	Liquid.
<b>Color</b>	Colorless to light yellow.
<b>Odor</b>	Faint Odor
<b>Emergency Overview</b>	<p>WARNING!            VERY TOXIC TO AQUATIC ORGANISMS.            CAUSES SEVERE EYE IRRITATION.            CAUSES SKIN IRRITATION.            MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.            MAY CAUSE ALLERGIC SKIN REACTION.</p> <p>Avoid prolonged contact with eyes, skin, and clothing. Avoid contact with eyes. Do not ingest. 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.</p>
<b>Possible Carcinogenic Effects</b>	<p><b>Quaternary ammonium compounds, coco alkyl trimethyl, chlorides:</b> IARC, NTP, OSHA, ACGIH: Not listed.  <b>Water:</b> IARC, NTP, OSHA, ACGIH: Not listed.  <b>Amines, coco alkyldimethyl:</b> IARC, NTP, OSHA, ACGIH: Not listed.</p>
<b>Routes of Entry</b>	Absorbed through skin. Dermal contact. Eye contact.

[See Toxicological Information \(section 11\)](#)

**Continued on Next Page**

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## Section 4. First Aid Measures

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<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.
<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.

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## Section 5. Fire Fighting Measures

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<b>Flammability of the Product</b>	May be combustible at high temperature.
<b>Flash Points</b>	Closed cup: >100°C (212°F). (Pensky-Martens.)
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> ...), halogenated compounds, hydrogen chloride.
<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.

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## Section 6. Accidental Release Measures

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<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. 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. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

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## Section 7. Handling and Storage

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<b>Handling</b>	Avoid prolonged contact with eyes, skin, and clothing. Avoid contact with eyes. Do not ingest. 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.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area.

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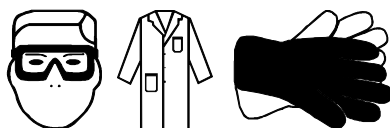
## Section 8. Exposure Controls, Personal Protection

**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

<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

### Exposure Limits United States

Quaternary ammonium compounds, coco alkyl trimethyl, chlorides	Not available.
Water	Not available.
Amines, coco alkyldimethyl	Not available.

## Section 9. Physical and Chemical Properties

<b>Physical State</b>	Liquid.
<b>Color</b>	Colorless to light yellow.
<b>Odor</b>	Faint Odor
<b>Molecular Weight</b>	Not applicable.
<b>Molecular Formula</b>	Not applicable.
<b>pH</b>	6 to 9 (Conc. (% w/w): 10) [Basic.]
<b>Boiling/Condensation Point</b>	100°C (212°F)
<b>Melting/Freezing Point</b>	4°C (39.2°F)
<b>Density</b>	The only known value is 1 g/cm <sup>3</sup> (Water).
<b>Vapor Pressure</b>	2.3 kPa (17 mmHg) (at 20°C)
<b>Evaporation Rate</b>	0.36 (Water) compared to Butyl acetate.
<b>Solubility</b>	Easily soluble in hot water, methanol, acetone. Soluble in cold water.
<b>Dispersion Properties</b>	See solubility in water, methanol, acetone. Surface Tension = 31 dynes/cm (0.1% solution)

## Section 10. Stability and Reactivity

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility with Various Substances</b>	Reactive with OXIDIZING AGENTS.
<b>Hazardous Decomposition Products</b>	These products are halogenated compounds, hydrogen chloride.

**Hazardous  
Polymerization**

Will not occur.

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

Ingredient Name or Product name	Test	Result	Route	Species
Quaternary ammonium compounds, coco alkyl trimethyl, chlorides	LD50	684 mg/kg	Oral	Rat based on data for: (similar material)
	LD50	1600 mg/kg	Dermal	Rabbit based on data for: (similar material)
Amines, coco alkyldimethyl	LD50	1400 mg/kg	Oral	Rat based on data for: (similar material)

**Special Remarks on  
Toxicity to Animals**

**Quaternary ammonium compounds, coco alkyl trimethyl, chlorides:** Similar Material: Acute Oral LD50 (Bobwhite quail) = 565 mg/kg  
 Similar Material: 8-day dietary LC50 (Bobwhite quail) >5000 ppm  
 Similar Material: 8-day dietary LC50 (Mallard ducks) >5000 ppm

**Chronic Effects on  
Humans**

**MUTAGENIC EFFECTS:** Non-mutagenic for bacteria and/or yeast. [Quaternary ammonium compounds, coco alkyl trimethyl, chlorides].

**Special Remarks on  
Chronic Effects on  
Humans**

**Quaternary ammonium compounds, coco alkyl trimethyl, chlorides:** Similar Material was not teratogenic.  
 Similar Material was not clastogenic.  
 Similar Material was not mutagenic in the Ames test.  
 Cytogenicity of Similar Material: EC50 (neutral uptake) = 1.0 ug/ml; EC50 (LOH leakage) = 4.2 ug/ml;  
 EC50 (SRB protein) = 1.3 ug/ml. based on data for: (similar material)

**Acute Effects Skin**

Severely irritating to the skin. Harmful in contact with skin. May cause sensitization by skin contact.

**Acute Effects Eyes**

Severely irritating to the eyes.

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

Ingredient Name or Product name	Species	Period	Result
Quaternary ammonium compounds, coco alkyl trimethyl, chlorides	Bluegill. based on data for: (similar material) (LC50)	96 hour(s)	1.94 mg/l
	Trout based on data for: (similar material) (LC50)	96 hour(s)	2.35 mg/l
	daphnia based on data for: (similar material) (EC50)	48 hour(s)	0.28 mg/l

**Biodegradability and  
Ecotoxicity Remarks**

**Quaternary ammonium compounds, coco alkyl trimethyl, chlorides:** 75% @ 28 day(s) CBT based on data for: (similar material)  
**Amines, coco alkyldimethyl:** 69% @ 28 day(s) CBT based on data for: (similar material)

**Biodegradable/OECD**

Readily biodegradable.

**Products of Degradation**These products are carbon oxides (CO, CO<sub>2</sub>) and water, nitrogen oxides (NO, NO<sub>2</sub>...), halogenated compounds.

## 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.	-	-	-		-
<b>IATA-DGR Class</b>	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 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: ARQUAD® C-33W

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: ARQUAD® C-33W:  
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: Quaternary ammonium compounds, coco alkyl trimethyl, chlorides; Water; Amines, coco alkyldimethyl

Component

EC Number

EC Status

EC Annex

Continued on Next Page

<b>European Union</b>	Quaternary ammonium compounds, coco alkyl trimethyl, chlorides	263-038-9	Not available.	Not available.
	Water	231-791-2	Not available.	Not available.
	Amines, coco alkyldimethyl	263-020-0	Not available.	Not available.
<b>Other International Lists</b>	Australia (NICNAS): Quaternary ammonium compounds, coco alkyl trimethyl, chlorides; Water; Amines, coco alkyldimethyl			
	Japan (MITI): Quaternary ammonium compounds, coco alkyl trimethyl, chlorides; Amines, coco alkyldimethyl			
	Korea (TCCL): Quaternary ammonium compounds, coco alkyl trimethyl, chlorides; Water; Amines, coco alkyldimethyl			
	Philippines (RA6969): Quaternary ammonium compounds, coco alkyl trimethyl, chlorides; Water; Amines, coco alkyldimethyl			

## 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.)



Validation Date  
Phone Number

5/26/2005  
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.