

Material Safety Data Sheet



MSDS# 15-046

Section 1. Chemical Product and Company Identification

Product name ARMEEN® CD**Material Uses** : Surfactant.**In Case of Emergency**

**Supplier/
Manufacturer** AKZO NOBEL SURFACE CHEMISTRY LLC
525 West Van Buren
Chicago, IL 60607-3823
www.surfactants.akzonobel.com

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

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

Section 2. Hazards Identification

Physical State Liquid.
Color Colorless to light yellow.
Odor Ammoniacal.

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

Do not get on skin or clothing. Avoid contact with eyes. Do not ingest. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Avoid contact of spilled material and runoff with soil and surface waterways.

Routes of Entry Absorbed through skin. Dermal contact. Eye contact.

See Toxicological Information (section 11)

Section 3. Composition/ Information on Ingredients

Name	CAS #	% by Weight
Amines, coco alkyl	61788-46-3	95-100
amines, dicoco alkyl	61789-76-2	0.001-2

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 30 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 30 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.

Continued on Next Page

Medical Conditions Aggravated by Overexposure:	Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.
---	--

Section 5. Fire Fighting Measures

Flammability of the Product	May be combustible at high temperature.
Flash Points	Closed cup: >150°C (302°F). (Pensky-Martens.)
Products of Combustion	These products are 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	Stop leak if without risk. If the product is in its solid form: Use a shovel to put the material into a convenient waste disposal container. If the product is in its liquid form: Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Absorb with an inert material and put the spilled material in an appropriate waste disposal. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on 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. 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.

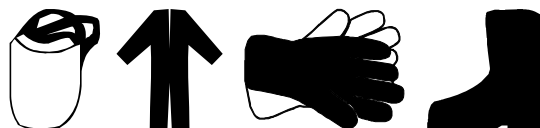
Section 8. Exposure Controls/ Personal Protection

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	Face shield.
Body	Full suit.
Respiratory	Wear appropriate respirator when ventilation is inadequate.
Hands	Gloves.
Feet	Suitable protective footwear.

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
Amines, coco alkyl	Not available.
amines, dicoco alkyl	Not available.

Section 9. Physical and Chemical Properties

Physical State	Liquid.
Color	Colorless to light yellow.
Odor	Ammoniacal.
pH	Basic.
Boiling/Condensation Point	180°C (356°F)
Melting/Freezing Point	16°C (60.8°F)
Cloud Point	19°C
Pour Point	18°C
Density	0.78 g/cm ³ (60°C / 140°F)
Vapor Pressure	0.1 kPa (1 mmHg) (at 20°C)
Evaporation Rate	<1 compared to Butyl acetate.
Solubility	Very slightly soluble in cold water.
Dispersion Properties	Not available.
Physical Chemical Comments	Viscosity = 44.2 SSU @ 35°C; 41.4 SSU @ 45°C; 37.8 SSU @ 55°C; 34.5 SSU @ 65°C; 33.6 SSU @ 75°C.

Section 10. Stability and Reactivity

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

Section 11. Toxicological Information

Toxicity to Animals

Ingredient Name or Product name	Test	Result	Route	Species
Amines, coco alkyl	LD50	1300 mg/kg	Oral	Rat
	LD50	>2000 mg/kg	Dermal	Rabbit
amines, dicoco alkyl	LD50	>2000 mg/kg	Oral	Rat

Special Remarks on Toxicity to Animals Amines, coco alkyl: INHALATION LC50 > 0.099 mg/L, 1 hour(s) Rat
amines, dicoco alkyl: ORAL (LD50) based on data for: (similar material)

Acute Effects Skin Corrosive to the skin. Practically non-toxic in contact with skin.

Acute Effects Eyes Severely irritating to the eyes.

Section 12. Ecological Information

Ecotoxicity

Ingredient Name or Product name	Species	Period	Result
Amines, coco alkyl	daphnia based on data for: (similar material) (EC50)	48 hour(s)	0.032 mg/l

Biodegradability and Ecotoxicity Remarks

Amines, coco alkyl: 56% @ 28 day(s) CBT 74% @ 42 day(s) CBT
amines, dicoco alkyl: 20% @ 28 day(s) CBT based on data for: (similar material)

Biodegradable/OECD

Readily biodegradable.

Products of Degradation

These products are nitrogen oxides (NO, NO₂...).






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	UN2735	Amines, liquid, corrosive, n.o.s. (Fatty acid derived amines). Marine pollutant (1-Dodecylamine)	8 -	II		Marine pollutant Marine pollutant (P)
TDG Classification	UN2735	AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acid derived amines)	8 -	II		Special Provisions Classified in Accordance with UN Recommendations
IMDG Class	UN2735	AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acid derived amines). Marine pollutant (1-Dodecylamine)	8 -	II	 	Marine pollutant Marine pollutant (P)
IATA-DGR Class	UN2735	Amines, liquid, corrosive, n.o.s. (Fatty acid derived amines)	8 -	II		-

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.

TSCA 5(a)2 final significant rules: No products were found.

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: ARMEEN® CD
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: ARMEEN® CD:
 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 E: Corrosive liquid.
 CEPA DSL: Amines, coco alkyl; amines, dicoco alkyl

European Union

Component	EC Number	EC Status	EC Annex
Amines, coco alkyl	262-977-1	Not available.	Not available.
amines, dicoco alkyl	263-086-0	Not available.	Not available.

Other International Lists

Australia (NICNAS): Amines, coco alkyl; amines, dicoco alkyl
 China: Amines, coco alkyl; amines, dicoco alkyl
 Germany water class: Amines, coco alkyl
 Japan (MITI): Amines, coco alkyl; amines, dicoco alkyl
 Korea (TCCL): Amines, coco alkyl
 Philippines (RA6969): Amines, coco alkyl; amines, dicoco alkyl

Section 16. Other Information

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

Health	3
Fire Hazard	1
Physical Hazards	0
Personal Protection	

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

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

Validation Date 5/25/2010.

Previous Validation Date 5/14/2007.

Validated by

Print Date

Phone Number

Product Safety Specialist

5/25/2010.

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.