



Material Safety Data Sheet

MSDS# 15-03239

Section 1. Chemical Product and Company Identification

Product name	AMADOL® 511	
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 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

FOR NON-AG USE ONLY

Section 2. Hazards Identification

Physical State	Liquid.
Color	Amber. (Dark.)
Odor	Faint odor
Emergency Overview	WARNING! CAUSES EYE AND SKIN IRRITATION. CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA. CONTAINS MATERIAL WHICH MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: KIDNEYS, LIVER. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Possible Carcinogenic Effects	amides, tall-oil fatty, n,n-bis(hydroxyethyl): IARC, NTP, OSHA, ACGIH: Not listed. Diethanolamine: IARC = 3; ACGIH NTP OSHA Not listed.
Routes of Entry	Dermal contact. Eye contact.

See Toxicological Information (section 11)

Section 3. Composition/ Information on Ingredients

Name	CAS #	% by Weight
amides, tall-oil fatty, n,n-bis(hydroxyethyl)	68155-20-4	98
Diethanolamine	111-42-2	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. 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.

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Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
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.
Flash Points	Closed cup: >93°C (199.4°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.
Large Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Section 7. Handling and Storage

Handling	Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
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.
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Personal Protection

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.
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Ingredient Name

Exposure Limits United States

amides, tall-oil fatty, n,n-bis(hydroxyethyl)
Diethanolamine

Not available.

ACGIH TLV (United States, 2006). Skin Notes: 1994-1995 Adoption

TWA: 2 mg/m³ 8 hour(s).

TWA: 0.46 ppm 8 hour(s).

NIOSH REL (United States, 2001).

TWA: 15 mg/m³ 10 hour(s).

TWA: 3 ppm 10 hour(s).

OSHA PEL 1989 (United States, 1989).

TWA: 15 mg/m³ 8 hour(s).

TWA: 3 ppm 8 hour(s).

Section 9. Physical and Chemical Properties

Physical State	Liquid.
Color	Amber. (Dark.)
Odor	Faint odor
pH	9 to 10 (Conc. (% w/w): 3) [Basic.]
Boiling/Condensation Point	Not determined.
Melting/Freezing Point	Not determined.
Density	0.95 g/cm ³ (25°C / 77°F)
Vapor Pressure	Not determined.
Vapor Density	Not determined.
Solubility	Insoluble in cold water.
Dispersion Properties	Dispersed in cold water.
Physical Chemical Comments	Solubility >10% in Water (Diethanolamine)

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Toxicity to Animals

Ingredient Name or Product name	Test	Result	Route	Species
Diethanolamine	LD50	2200 mg/kg	Oral	Rabbit
	LD50	3300 mg/kg	Oral	Mouse
	LD50	12200 mg/kg	Dermal	Rabbit

Special Remarks on Toxicity to Animals

Harmful effects are not expected from short periods of contact. Short-term harmful health effects are not expected from vapor generated at ambient temperature.

Chronic Effects on Humans

CARCINOGENIC EFFECTS: Classified None. by NIOSH [Diethanolamine]. Classified 3 (Not classifiable for human.) by IARC [Diethanolamine].
Contains material which causes damage to the following organs: upper respiratory tract, skin, eye, lens or cornea.
Contains material which may cause damage to the following organs: kidneys, liver.

Acute Effects Skin

Severely irritating to the skin. Practically non-toxic in contact with skin.

Acute Effects Eyes

Severely irritating to the eyes.

Special Remarks on Other Toxic Effects on Humans

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Prolonged contact may cause irritation.

Section 12. Ecological Information

Ecotoxicity

Ingredient Name or Product name	Species	Period	Result
Diethanolamine	Pimephales promelas (LC50)	96 hour(s)	100 mg/l
	Daphnia magna (LC50)	96 hour(s)	100 mg/l
	Pimephales promelas (LC50)	96 hour(s)	>100 mg/l
	Daphnia magna (LC50)	96 hour(s)	>100 mg/l
	Pimephales promelas (LC50)	96 hour(s)	1370 mg/l
	Pimephales promelas (LC50)	96 hour(s)	1480 mg/l

Biodegradability and Ecotoxicity Remarks

Not expected to be acutely toxic to aquatic organisms.

Products of Degradation

These products are carbon oxides (CO, CO₂) and water, 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.

RCRA Classification

This product is not considered a RCRA hazardous waste.

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	NA 3082	Environmentally hazardous substances, liquid, n.o.s. (Diethanolamine)	9 -	III		Remarks Not regulated by ground or rail if shipped or transported in containers less than 450 liters.
TDG Classification	Not regulated.	-	- -	-		-
IMDG Class	Not regulated.	-	- -	-		-
IATA-DGR Class	Not regulated.	-	- -	-		-

Section 15. Regulatory Information

HCS Classification

Irritating material
Target organ effects

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.

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CERCLA: Hazardous substances.: Diethanolamine: 100 lbs. (45.36 kg);

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: AMADOL® 511

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: AMADOL® 511:

Immediate (Acute) Health Hazard

SARA 313 Form R Reporting Requirements

Diethanolamine 2

SARA 313 Supplier Notification

Diethanolamine 2

State Regulations

Pennsylvania RTK: Diethanolamine: (environmental hazard, generic environmental hazard)

Massachusetts RTK: Diethanolamine

New Jersey: Diethanolamine

California prop. 65: No products were found.

WHMIS (Canada)

Class D-2B: Material causing other toxic effects (TOXIC).

CEPA DSL: amides, tall-oil fatty, n,n-bis(hydroxyethyl); Diethanolamine

European Union

Component	EC Number	EC Status	EC Annex
amides, tall-oil fatty, n,n-bis(hydroxyethyl)	268-949-5	Not available.	Not available.
Diethanolamine	203-868-0	Not available.	603-071-00-1

Other International Lists

Australia (NICNAS): amides, tall-oil fatty, n,n-bis(hydroxyethyl); Diethanolamine

China: amides, tall-oil fatty, n,n-bis(hydroxyethyl); Diethanolamine

Germany water class: amides, tall-oil fatty, n,n-bis(hydroxyethyl); Diethanolamine

Japan (MITI): Diethanolamine

Korea (TCCL): amides, tall-oil fatty, n,n-bis(hydroxyethyl); Diethanolamine

Philippines (RA6969): amides, tall-oil fatty, n,n-bis(hydroxyethyl); Diethanolamine

Section 16. Other Information

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

Health	1
Fire Hazard	1
Reactivity	0
Personal Protection	

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



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

Validation Date 8/14/2007.

Previous Validation Date 5/14/2007.

Validated by Elitania Perez

Print Date 8/14/2007.

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.