

Material Safety Data Sheet

Material Name: PENNCHEM® MORTAR INITIATOR

ID:

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

Product Trade Name PENNCHEM MORTAR INITIATOR

Manufacturer Information

Ergon Armor (601) 933-3540
Corrosion Engineering
P.O. Box 1639 (800) 424-9300
Jackson, MS 39215-1639

*** Section 2 - Composition / Information on Ingredients ***

Component	CAS #	Typical Wt. %	OSHA
N,N'-Diethylaniline	91-66-7	100	Y

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Communication Standard (29 CFR 1910.1200)

This material is classified as hazardous under Federal OSHA regulation.

The components of this product are all on the TSCA inventory list.

*** Section 3 - Hazards Identification ***

Emergency Overview:

Clear liquid, mild odor

WARNING!

CAUSES EYE AND SKIN IRRITATION.

HARMFUL IF ABSORBED THROUGH SKIN.

CAN CAUSE METHEMOGLOBINEMIA, DECREASING OXYGEN IN BLOOD

PROLONGED EXPOSURE TO HIGH VAPOR CONCENTRATIONS CAN CAUSE CENTRAL NERVOUS

SYSTEM DEPRESSION INCLUDING HEADACHE, DIZZINESS, WEAKNESS, CONFUSION, NAUSEA, AND LOSS OF CONSCIOUSNESS

Potential Health Effects:

Diethylaniline

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Contact with liquid material may be slightly irritating to eyes and skin and may cause systemic toxicity when absorbed through the skin. Overexposure by inhalation of vapor, accidental ingestion (swallowing) or prolonged contact of skin with liquid material may result in methemoglobinemia which reduces the oxygen-carrying capacity of the blood and may result in bluish appearance of the skin (cyanosis). Central nervous system (CNS) depression including tremors, incoordination and, in severe cases, death may also result. In the workforce, chronic overexposure to aniline compounds has resulted in decreased red blood cell counts. This material is considered, on the basis of single exposure (acute) animal tests, to be slightly toxic if ingested or inhaled, moderately toxic if absorbed through skin and slightly irritating to eyes and skin.

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*** Section 4 - First Aid Measures ***

IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IF ON SKIN, immediately wash with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Destroy contaminated shoes.

IF SWALLOWED, induce vomiting immediately as directed by medical personnel. Get medical attention. Call a Poison Control Center. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

NOTE TO PHYSICIANS, If absorbed, this material can cause methemoglobinemia which reduces the oxygen carrying capacity of blood, that in sufficient amounts causes cyanosis. Since methemoglobin reversion to hemoglobin occurs spontaneously after termination of exposure, asymptomatic patients with methemoglobin levels under 30% may be treated with bed rest, oxygen, and supportive care. Patients with symptoms of cyanosis or with methemoglobin levels greater than 30% may also respond to intravenous injection of methylene blue. See package insert for indications, dosage, and precautions or call a Poison Control Center for guidance. Repeat methemoglobin levels one to two hours after antidote to assess response.

*** Section 5 - Fire Fighting Measures ***

Fire & Explosion Hazards:

Auto-Ignition Temperature	NE	
Flash Point	183 deg F	Flash Point Method TCC
Flammable Limits-	Upper - NE	
	Lower - NE	

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

Avoid breathing fumes from fire-exposed material.

*** Section 6 - Accidental Release Measures ***

Spill or Leak

Contain spill. Stop leak at source if this can be done safely. Ventilate area. Nonessential personnel should leave the area until cleanup is completed. Pump liquid into DOT-approved drums for disposal. Absorb remaining liquid onto inert absorbent and place in DOT approved drums for disposal. Wash area with water. Keep concentrate and wash water from entering sewers or waterways. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

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*** Section 7 - Handling and Storage ***

Handling Procedures:

Do not taste or swallow. Do not get in eyes, on skin or clothing. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Empty container may contain hazardous residues.

Storage Procedures:

Store in a cool, dry place. Avoid excessive heat. Store out of direct sunlight in a cool, well-ventilated place.

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

The components of this product have no established Airborne Exposure Guidelines

-Only those components with exposure limits are printed in this section.

-Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.

-ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.

Engineering Controls:

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal Protective Equipment

As prescribed in the OSHA Standard for Personal Protective Equipment (29 CFR 1910.132), employers must perform a Hazard Assessment of all workplaces to determine the need for, and selection of, proper protective equipment for each task performed.

Eyes/Face Protective Equipment:

Where there is potential for eye contact, wear chemical goggles and have eye-flushing equipment available.

Skin Protection:

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Rinse contaminated skin promptly. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.

Respiratory Protection:

Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full-face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

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*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor	Dark brown liquid with odor of furfuryl alcohol
pH	NA
Specific Gravity	0.94 @ 25/25 C
Vapor Pressure	1 @ 20 C
Vapor Density	NE
Melting Point	NA
Freezing Point	-38 deg C
Boiling Point	217 C
Solubility In Water	Negligible
Percent Volatile	100%

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability:

This material is chemically stable under normal and anticipated storage and handling conditions. However, this material can undergo hazardous polymerization. See Hazardous Polymerization below for conditions to avoid.

Incompatibility:

Contact with strong acids causes violent reaction and heat.

Decomposition Products:

Oxides of carbon.

Hazardous Polymerization:

Hazardous polymerization may occur if contaminated with strong mineral acid. Heat will speed polymerization.

*** Section 11 - Toxicological Information ***

Data on this material and/or its components are summarized below.

Diethylaniline

Single exposure (acute) studies indicate that this material is slightly toxic to rats if swallowed (LD50 782-1,289 mg/kg) or if inhaled (4-hr LC50 4.15 mg/l), moderately toxic to rats if absorbed through skin (LD50 420 mg/kg), and slightly irritating to rabbit skin and eyes. The toxicity of this material is due to its ability to interact with and damage the red blood cell causing methemoglobinemia which reduces the oxygen carrying capacity of hemoglobin. This material is less toxic than aniline, but causes similar effects.

Pregnant rats were administered 50, 250 or 500 mg/kg n,n-diethylaniline/day during gestation. At 500 mg/kg, maternal toxicity was associated with decreased fetal weight and increases in resorption in the fetuses. No increase in birth defects were noted at any dose level and no toxic effects to the fetus were noted at 250 mg/kg and below. This material has not produced genetic changes standard tests using bacterial and animal cells.

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*** Section 12 - Ecological Information ***

Ecotoxicity:

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Data on this material and/or its components are summarized below.

Diethylaniline

LC50 Fathead minnow: 16.4 mg/l, Slightly Toxic

LC50 Himehada: 33 mg/l, Slightly Toxic

Environmental Fate:

No data is available concerning the environmental fate, biodegradation or bioconcentration for this product.

*** Section 13 - Disposal Considerations ***

US EPA Waste Numbers & Descriptions:

A: General Product Information

Recover, reclaim or recycle when practical. Dispose of in an approved landfill if allowed locally. Comply with federal, state, and local regulations. Dispose of in a permitted waste management facility if landfill is not practical.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

*** Section 14 - Transportation Information ***

US DOT Information

DOT Name	N,N-Diethylaniline
DOT Technical Name	
DOT Hazard Class	6.1
UN Number	UN 2432
DOT Packing Group	PG III

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*** Section 15 - Regulatory Information ***

US Federal Regulations

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute) Health	Y
Delayed (Chronic) Health	Y
Fire	N
Reactive	N
Sudden Release of Pressure	N

The components of this product are all on the TSCA inventory list.

B: Component Analysis

SARA Reportable Quantities

CERCLA RQ

SARA TPQ

N,N'-Diethylaniline

1000 LBS

State Regulations

A: General Product Information

No additional information available.

B: Component Analysis – State

Massachusetts Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Massachusetts Right to Know Substance List.
N,N'-Diethylaniline

New Jersey Right to Know

This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right to Know Substance List.
N,N'-Diethylaniline

Pennsylvania Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Right to Know Substance List.
N,N'-Diethylaniline

Other Regulations

A: General Product Information

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B: Component Analysis – Inventory/Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
N,N'-Diethylaniline	91-66-7	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
N,N'-Diethylaniline	91-66-7	1%

* * * Section 16 - Other Information * * *

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NFPA = National Fire Protection Association; HMIS = Hazardous Material Identification System; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Ergon Armor bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.