

MATERIAL SAFETY DATA SHEET

Chem International, Inc.

1. Chemical Product and Company Identification

Product Name Octadecyl Dimethylamine

Chem International, Inc.
P.O. Box 5501
Greenville, SC 29606

Emergency Telephone Numbers
Transportation:
CHEMTREC 1-800-424-9300
(703-527-3387 Outside United States)
Information:
Chem International, Inc. – 864-458-7868

2. Composition/Information on Ingredients

<u>Principle Components</u>	<u>CAS#</u>	<u>OSHA Hazard</u>	<u>% Wt</u>
Octadecanamine, N,N-Dimethyl-	124-28-7	Y	95-99
Hexadecanamine, N,N-Dimethyl-	112-69-6	Y	< 3.5
Eicosanamine, N,N-Dimethyl-	45275-75-9	Y	< 1.5
Tetradecanamine, N,N-Dimethyl	112-75-4	Y	< 1

3. Hazards Identification

Emergency Overview: Danger! Corrosive to skin and eyes. Causes burns. Risk of serious damage to eyes. May be harmful if swallowed or inhaled. Corrosive to metals.

Appearance: Clear to hazy liquid

Odor: Ammonia-like odor

Potential Health Effects:

Eye: Corrosive. Can cause burns, tissue destruction, irreversible eye damage.

Skin Contact: Corrosive. Can cause inflammation, blisters, burns.

Ingestion: May be harmful if swallowed. May cause nausea, vomiting, irritation, burns to mouth and esophagus.

Inhalation: May be harmful if inhaled. May cause serious damage to lung tissue and respiratory tract.

Chronic Effects:

This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

4. First Aid Measures

Eye Exposure:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention.

Skin Exposure:

In case of contact, immediately wash with water for 30 minutes. Seek medical attention. Remove contaminated clothing and shoes while washing. Do not reuse. Dispose of contaminated clothing properly.

Ingestion:

Do not induce vomiting, unless directed to do so by a physician. If victim is conscious and alert, wash out mouth with water and keep at rest. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side. Seek medical attention.

Inhalation:

Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR. Seek medical attention.

Medical Conditions Possibly Aggravated by Exposure:

Skin contact may aggravate existing skin disease. Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema, or bronchitis.

Note to Physician:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically. No specific antidote available.

5. Fire Fighting Measures

Flammable Properties:

Flash Point.....	200° F (93° C)
Test Method.....	Closed Cup
Flammable Limits	
Lower Explosion Limit.....	No Data
Upper Explosion Limit.....	No Data

Extinguishing Media:

Recommended (small fires): dry chemical, carbon dioxide
Recommended (large fire): alcohol foam, universal foam, water spray
Not Recommended: water jet (frothing possible)

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Unusual Fire and Explosion Hazards:

Product will burn under fire conditions. Under fire conditions, toxic, corrosive fumes are emitted. Closed containers may rupture (due to buildup or pressure) when exposed to extreme heat.

Hazardous Decomposition Materials (Under Fire Conditions):

Oxides of nitrogen, oxides of carbon

6. Accidental Release Measures

Evacuation Procedures and Safety:

Wear appropriate protective gear for the situation. See Personal Protection information in section 8.

Containment of Spill:

Stop leak if it can be done without risk. Dike spill using absorbent or impervious materials such as earth, sand or clay. Follow procedure described below under Cleanup and Disposal of Spill.

Cleanup and Disposal of Spill:

Absorb with an inert absorbent. Sweep up and place in an appropriate closed container (see section 7). Clean up residual material by washing area with water. Collect washings for disposal.

Environmental and Regulatory Reporting:

Do not flush to drain. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies. Prevent material from entering public sewer system or any waterways.

7. Handling and Storage

Minimum/Maximum Storage Temperatures:

4° to 40° C (39° to 104° F)

Handling:

Personnel handling this product should be thoroughly trained as to its hazards. Do not get on skin or in eyes. Do not breathe vapors and mists. Do not ingest.

Storage:

Store in an area that is dry, well-ventilated, away from ignition sources, away from incomparable materials (see section 10). Store in tightly closed containers.

8. Exposure Controls/Personal Protection

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Guidelines:

No exposure limits were found for this product or any of its ingredients.

Engineering Controls:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

Respiratory Protection:

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Eye/Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area. Face contact should be prevented through use of a face shield.

Skin Protection:

Skin contact must be prevented through the use of permeation resistant clothing, gloves and footwear, selected with regard for use conditions and exposure potential. An emergency shower must be readily accessible to the work area. Consideration must be given both to durability as well as permeation resistance.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following measures should be taken when working with or handling this material:

1. Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
2. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
3. Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. Physical and Chemical Properties

Physical Appearance	Clear to hazy liquid
Odor	Ammonia-like odor
Solubility (in water)	Practically insoluble
pH	Not applicable
Specific Gravity	0.8 at 25° C (77° F)
Melting Point	Not available
Freezing Point.....	< 21° C (70° F)
Boiling Point.....	345 to 360° C (653 to 680° F) at 760 mmHg
Vapor Pressure	Not available
Vapor Density	Not available
Evaporation Rate	< 1 (Butyl Acetate = 1)
Octanol/Water Partition Coefficient.....	Not available

10. Stability and Reactivity

Chemical Stability:

This material is stable under normal handling and storage conditions described in Section 7.

Conditions to be Avoided:

Extreme heat
Open flame
Ignition sources

Materials/Chemicals to be Avoided:

Aluminum
Zinc
Copper
Copper alloys
Strong acids
Strong oxidizing agents
Zinc alloy
Peroxides
Metals
Phenols

The following hazardous decomposition products might be found:

Decomposition Type: Thermal

Oxides of nitrogen
Oxides of carbon

Hazardous polymerization will not occur.

11. Toxicological Information

Acute Eye Irritation:

The following data are for similar or related products.

Toxicological Information and Interpretation

Eye – eye irritation, **

Corrosive.

Acute Skin Irritation:

The following data are for similar or related products.

Toxicological Information and Interpretation

Skin – Skin irritation, **

Corrosive.

Skin – sensitization, **

Not sensitizing.

Acute Dermal Toxicity:

No test data found for product.

Acute Respiratory Irritation:

No test data found for product.

Acute Inhalation Toxicity:

No test data found for product.

Acute Oral Toxicity:

No test data found for product.

Chronic Toxicity:

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be “probable” or “suspected” human carcinogens.

No additional test data found for product.

12. Ecological Information

Ecotoxicological Information:

May cause adverse environmental impact if material reaches waterways.

Chemical Fate Information:

No data found for product. The following data is for similar or related product. Inherently biodegradable.

13. Disposal Considerations

Waste Disposal Method:

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Container Handling and Disposal:

Any containers or equipment used should be decontaminated immediately after use. Consult state and local regulations regarding the proper disposal of container.

14. Transport Information

US DOT:

Shipping Name: Amines, liquid, corrosive, n.o.s.
 Technical Name: (fatty tertiary amine)
 ID Number: UN2735
 Hazard Class: 8
 Packing Group: III
 Emergency Guide #: 153
 DOT Marine Pollutant

TDG:

Shipping Name: Amines, liquid, corrosive, n.o.s.
 Technical Name: (fatty tertiary amine)
 ID Number: UN2735
 Hazard Class: 8
 Packing Group: III

IMO:

Shipping Name: Amines, liquid, corrosive, n.o.s.
 Technical Name: (fatty tertiary amine)
 ID Number: UN2735
 Hazard Class: 8
 Packing Group: III
 IMO Marine Pollutant

IATA:

Shipping Name: Amines, liquid, corrosive, n.o.s.
 Technical Name: (fatty tertiary amine)
 ID Number: UN2735
 Hazard Class: 8
 Packing Group: III

15. Regulatory Information

Inventory Status:

<u>Inventory</u>	<u>Status</u>
United States (TSCA)	Y
Canada (DSL)	Y
Europe (EINECS/ELINCS)	Y
Australia (AICS)	Y
Japan (MITI)	Y
South Korea (KECL)	Y

Y = All ingredients are on the inventory

Inventory Issues:

All functional components of this product are listed on the TSCA Inventory.

SARA Title III Hazard Classes:

Fire Hazard – NO
Reactive Hazard – NO
Release of Pressure – NO
Acute Health Hazard – YES
Chronic Health Hazard – NO

State Regulations:

This product does not contain any components that are regulated under California Proposition 65.

16. Other Information

MSDS Revision Status:

MSDS Date..... : December 1, 2012
Reason for Revision..... : Date Revision Only

National Fire Protection Association Hazard Ratings—NFPA (R):

3: Health Hazard Rating—Serious
1: Flammability Rating—Slight
0: Instability Rating—Minimal

National Paint & Coating Hazardous Materials Identification System—HMIS (R):

3: Health Hazard Rating—Serious
1: Flammability Rating—Slight
0: Reactivity Rating—Minimal