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**MATERIAL SAFETY DATA SHEET**

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**n,n-Dimethylaniline, 99%**  
11332

\*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: n,n-Dimethylaniline, 99%

Synonyms:

N,N-Dimethylbenzeneamine; Dimethylphenylamine.

Company Identification: Acros Organics N.V.

One Reagent Lane

Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

\*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

CAS#	Chemical Name	%	EINECS#
121-69-7	N,N-Dimethylaniline, 99%	99	204-493-5

Hazard Symbols: T N

Risk Phrases: 23/24/25 40 51/53

\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

EMERGENCY OVERVIEW

Appearance: yellow. Flash Point: 62.78 deg C.

Caution! Combustible liquid. May be harmful if absorbed through the skin. May be harmful if swallowed. May cause central nervous system depression. May cause severe eye irritation and possible injury. Causes digestive and respiratory tract irritation. May cause cyanosis with bluish skin. May cause blood abnormalities.

Target Organs: Blood, kidneys, central nervous system, liver.

Potential Health Effects

Eye:

May cause severe eye irritation. May result in corneal injury.

Skin:

Causes skin irritation. May be absorbed through the skin in harmful amounts.

Ingestion:

Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause methemoglobinemia, cyanosis, convulsions, and death. Exposure may

cause anemia and other blood abnormalities. May be harmful if swallowed. May cause central nervous system depression.

Inhalation:

May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. May cause effects similar to those described for ingestion.

Chronic:

Chronic ingestion may cause liver damage.

\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\*

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately.

Skin:

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

For methemoglobinemia, administer oxygen alone or with Methylene blue depending on the methemoglobinemia concentration in the blood.

\*\*\*\* SECTION 5 - FIRE FIGHTING MEASURES \*\*\*\*

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Reacts with most metals to form highly flammable hydrogen gas which can form explosive mixtures with air. Containers may explode in the heat of a fire. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Do NOT get water inside containers. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature: 371.11 deg C ( 700.00 deg F)

Flash Point: 62.78 deg C ( 145.00 deg F)

NFPA Rating: health-3; flammability-2; reactivity-0

Explosion Limits, Lower: 1.20

Upper: 7.00

\*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\*

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Clean up spills immediately, observing precautions in the Protective Equipment section. Scoop up

with a nonsparking tool, then place into a suitable container for disposal. Remove all sources of ignition. Do not get water inside containers.

\*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\*

Handling:

Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not get on skin or in eyes. Avoid ingestion and inhalation.

Storage:

Store in a cool, dry place. Store in a tightly closed container. Flammables-area. Do not store in metal containers.

\*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\*

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
N,N-Dimethylaniline, 99%	5 ppm ; 25 mg/m3; 10 ppm STEL; 50 mg/m3 STEL; skin - potential for cutaneous absorption	5 ppm TWA; 25 mg/m3 TWA 100 ppm IDLH	5 ppm TWA; 25 mg/m3 TWA

OSHA Vacated PELs:

N,N-Dimethylaniline, 99%:  
5 ppm TWA; 25 mg/m3 TWA

Personal Protective Equipment

Eyes:

Wear safety glasses and chemical goggles if splashing is possible. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

\*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\*

Physical State:

Liquid

Appearance: yellow  
Odor: amine-like  
pH: Not available.  
Vapor Pressure: 1 mm Hg @ 29.5 C  
Vapor Density: 4.17  
Evaporation Rate: Not available.  
Viscosity: Not available.  
Boiling Point: 193 deg C  
Freezing/Melting Point: 2.5 deg C  
Decomposition Temperature: Not available.  
Solubility: Insoluble in water.  
Specific Gravity/Density: 0.9557  
Molecular Formula: C8H11N  
Molecular Weight: 121.0837

## \*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\*

## Chemical Stability:

Stable under normal temperatures and pressures.

## Conditions to Avoid:

High temperatures, mechanical shock, incompatible materials, ignition sources, moisture, metals.

## Incompatibilities with Other Materials:

Metals, water.

## Hazardous Decomposition Products:

Carbon monoxide, oxides of nitrogen, irritating and toxic fumes and gases, carbon dioxide, hydrogen gas.

Hazardous Polymerization: Has not been reported.

## \*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

## RTECS#:

CAS# 121-69-7: BX4725000

## LD50/LC50:

CAS# 121-69-7: Oral, rat: LD50 = 1410 mg/kg; Skin, rabbit: LD50 = 1770 mg/kg.

## Carcinogenicity:

N,N-Dimethylaniline, 99% -

ACGIH: A4 - Not Classifiable as a Human Carcinogen

California: carcinogen - initial date 1/1/90 (listed as ANILINE).

NIOSH: occupational carcinogen (listed as ANILINE)

OSHA: Possible select carcinogen (listed as ANILINE).

IARC: Group 3 carcinogen

## Epidemiology:

No information available.

## Teratogenicity:

No information available.

## Reproductive Effects:

No information available.

## Neurotoxicity:

No information available.

## Mutagenicity:

No information available.

## Other Studies:

Groups of five male rats were administered the chemical by gavage at 1000 or 100 mg/kg. All animals died after 2 doses or were euthanatized due to poor condition. High doses caused large dark spleens, brownish discoloration of blood and internal organs.

## \*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

## Ecotoxicity:

Not available.  
Environmental Fate:  
Not available.  
Physical/Chemical:  
Not available.  
Other:  
Not available.

## \*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

Dispose of in a manner consistent with federal, state, and local regulations.  
RCRA D-Series Maximum Concentration of Contaminants:  
None listed.  
RCRA D-Series Chronic Toxicity Reference Levels: None listed.  
RCRA F-Series: None listed.  
RCRA P-Series: None listed.  
RCRA U-Series: None listed.  
Not listed as a material banned from land disposal according to RCRA.

## \*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

## US DOT

Shipping Name: N,N-DIMETHYLANILINE  
Hazard Class: 6.1  
UN Number: UN2253  
Packing Group: II

## IMO

Shipping Name: N,N-DIMETHYLANILINE  
Hazard Class: 6.1  
UN Number: 2253  
Packing Group: II

## IATA

Shipping Name: N,N-DIMETHYLANILINE  
Hazard Class: 6.1  
UN Number: 2253  
Packing Group: II

## RID/ADR

Shipping Name: N,N-DIMETHYLANILINE  
Dangerous Goods Code: 6.1(12B)  
UN Number: 2253

## Canadian TDG

Shipping Name: N,N-DIMETHYLANILINE  
Hazard Class: 6.1  
UN Number: UN2253

## \*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

## US FEDERAL

## TSCA

CAS# 121-69-7 is listed on the TSCA inventory.  
Health & Safety Reporting List  
None of the chemicals are on the Health & Safety Reporting List.  
Chemical Test Rules  
None of the chemicals in this product are under a Chemical Test Rule.  
Section 12b  
None of the chemicals are listed under TSCA Section 12b.  
TSCA Significant New Use Rule  
None of the chemicals in this material have a SNUR under TSCA.

## SARA

Section 302 (RQ)  
None of the chemicals in this material have an RQ.

## Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

## SARA Codes

CAS # 121-69-7: acute, chronic, flammable.

## Section 313

This material contains N,N-Dimethylaniline, 99% (CAS# 121-69-7, 99%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

## Clean Air Act:

CAS# 121-69-7 is listed as a hazardous air pollutant (HAP).  
This material does not contain any Class 1 Ozone depletors.  
This material does not contain any Class 2 Ozone depletors.

## Clean Water Act:

CAS# 121-69-7 is listed as a Hazardous Substance under the CWA.  
None of the chemicals in this product are listed as Priority Pollutants under the CWA.  
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

## OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

## STATE

N,N-Dimethylaniline, 99% can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:

WARNING: This product contains N,N-Dimethylaniline, 99%, listed as 'ANILINE', a chemical known to the state of California to cause cancer.

California No Significant Risk Level:

CAS# 121-69-7: no significant risk level = 100 ug/day (listed under ANILINE)

## European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T N

Risk Phrases:

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R 40 Possible risks of irreversible effects.

R 51/53 Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 28 After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer).

S 36/37 Wear suitable protective clothing and gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

## WGK (Water Danger/Protection)

CAS# 121-69-7: 2

## Canada

CAS# 121-69-7 is listed on Canada's DSL/NDSL List.

This product does not have a WHMIS classification.

CAS# 121-69-7 is not listed on Canada's Ingredient Disclosure List.

## Exposure Limits

CAS# 121-69-7: OEL-AUSTRALIA:TWA 5 ppm (25 mg/m<sup>3</sup>);STEL 10 ppm (50 mg/m<sup>3</sup>);Skin. OEL-BELGIUM:TWA 5 ppm (25 mg/m<sup>3</sup>);STEL 10 ppm (50 mg/m<sup>3</sup>);Skin. OEL-DENMARK:TWA 5 ppm (25 mg/m<sup>3</sup>);Skin. OEL-FINLAND:TWA 5 ppm (25 mg/m<sup>3</sup>);STEL 10 ppm (50 mg/m<sup>3</sup>);Skin. OEL-FRANCE:TWA 5 ppm (25 mg/m<sup>3</sup>);Skin.



. OEL-GERMANY:TWA 5 ppm (25 mg/m3). OEL-HUNGARY:TWA 5 mg/m3;STEL 10 mg/m3;Skin. OEL-THE NETHERLANDS:TWA 5 ppm (25 mg/m3);Skin. OEL-THE PHILIPPINES:TWA 5 ppm (25 mg/m3). OEL-POLAND:TWA 5 mg/m3. OEL-RUSSIA:STEL 0.2 mg/m3;Skin. OEL-SWITZERLAND:TWA 5 ppm (25 mg/m3);STEL 10 ppm (50 mg/m3);Skin. OEL-UNITED KINGDOM:TWA 5 ppm (25 mg/m3);STEL 10 ppm;Skin. OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

\*\*\*\* SECTION 16 - ADDITIONAL INFORMATION \*\*\*\*

MSDS Creation Date: 3/03/1995 Revision #5 Date: 7/31/1998

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

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