

# Material Safety Data Sheet

## 3,4-Diaminotoluene, 97%

ACC# 69207

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 3,4-Diaminotoluene, 97%

**Catalog Numbers:** AC112430000, AC112431000

**Synonyms:** 3,4-Toluediamine.

**Company Identification:**

Acros Organics N.V.

One Reagent Lane

Fair Lawn, 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	Percent	EINECS/ELINCS
496-72-0	3,4-Diaminotoluene	97%	207-826-2

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: light brown chips.

**Warning!** Causes respiratory tract irritation. Irritant. Possible risks of irreversible effects. Causes eye and skin irritation. May cause digestive tract irritation. May cause central nervous system depression. May cause cardiac disturbances.

**Target Organs:** Central nervous system, cardiovascular system.

#### Potential Health Effects

**Eye:** Causes eye irritation. May cause chemical conjunctivitis.

**Skin:** Causes skin irritation.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause cardiac disturbances. May cause central nervous system depression.

**Inhalation:** Causes respiratory tract irritation. May cause cardiac abnormalities. Can produce delayed pulmonary edema. Inhalation at high concentrations may cause CNS depression and asphyxiation.

**Chronic:** Effects may be delayed. Possible risk of irreversible effects.

### Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**Notes to Physician:** Treat symptomatically and supportively.

### 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Containers may explode when heated. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes. Runoff from fire control or dilution water may cause pollution.

**Extinguishing Media:** Use water spray to cool fire-exposed containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
3,4-Diaminotoluene	none listed	none listed	none listed

**OSHA Vacated PELs:** 3,4-Diaminotoluene: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** 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:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Chips

**Appearance:** light brown

**Odor:** None reported.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 155 - 156 deg C @ 18.00mmHg

**Freezing/Melting Point:** 88.00 - 90.00 deg C

**Decomposition Temperature:** Not available.

**Solubility:** 16 g/l (20 c)

**Specific Gravity/Density:** Not available.

**Molecular Formula:** C7H10N2

**Molecular Weight:** 122.17

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Conditions to Avoid:** Incompatible materials, dust generation, excess heat, strong oxidants.

**Incompatibilities with Other Materials:** Oxidizing agents.

**Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 496-72-0: XS9820000

**LD50/LC50:**

Not available.

**Carcinogenicity:**

CAS# 496-72-0:

- **ACGIH:** Not listed.
- **California:** carcinogen, initial date 1/1/88 (listed as Toluene 2,4-diamine).
- **NTP:** Suspect carcinogen (listed as Toluene 2,4-diamine).
- **IARC:** Group 2B carcinogen (listed as Toluene 2,4-diamine).

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** Mutagenic effects have occurred in experimental animals.

**Neurotoxicity:** No information available.

**Other Studies:**

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	TOXIC SOLIDS, ORGANIC, N.O.S.	No information available.
<b>Hazard Class:</b>	6.1	
<b>UN Number:</b>	UN2811	
<b>Packing Group:</b>	III	

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 496-72-0 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.

#### CERCLA Hazardous Substances and corresponding RQs

CAS# 496-72-0: 10 lb final RQ (Listed under Toluenediamine); 4.54 kg final RQ (Listed under Tol

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### Section 313

This material contains 3,4-Diaminotoluene (listed as Toluene 2,4-diamine), 97%, (CAS# 496-72-0) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

#### Clean Air Act:

CAS# 496-72-0 (listed as Toluene 2,4-diamine) is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances 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

CAS# 496-72-0 can be found on the following state right to know lists: California, (listed as Toluene 2,4-diamine), New Jersey, Pennsylvania, Minnesota, (listed as Toluene 2,4-diamine), Massachusetts.

#### California Prop 65

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

WARNING: This product contains 3,4-Diaminotoluene, listed as 'Toluene 2,4-diamine', a chemical known to the state of California to cause cancer.

California No Significant Risk Level: CAS# 496-72-0: 0.2 æg/day NSRL (listed under Toluene 2,4-diamine)

### European/International Regulations

#### European Labeling in Accordance with EC Directives

#### Hazard Symbols:

XN

#### Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 40 Limited evidence of a carcinogenic effect.

#### Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

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

**WGK (Water Danger/Protection)**

CAS# 496-72-0: 2

**Canada - DSL/NDSL**

CAS# 496-72-0 is listed on Canada's NDSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 496-72-0 is listed on the Canadian Ingredient Disclosure List.

<b>Section 16 - Additional Information</b>
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**MSDS Creation Date:** 9/02/1997

**Revision #5 Date:** 10/03/2005

*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 event 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.*