

# Material Safety Data Sheet

## 2,6-Dimethoxybenzotrile, 97%

ACC# 44598

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 2,6-Dimethoxybenzotrile, 97%

**Catalog Numbers:** AC181720000, AC181720100

**Synonyms:** None known.

**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 |
|------------|-------------------------|---------|---------------|
| 16932-49-3 | 2,6-Dimethoxybenzotrile | 97      | 241-000-2     |

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: light beige crystalline powder.

**Warning!** Harmful if swallowed, inhaled, or absorbed through the skin. May cause eye and skin irritation. May cause respiratory tract irritation. Metabolized to cyanide in the body, which may cause headache, dizziness, weakness, unconsciousness, convulsions, coma and possible death. The toxicological properties of this material have not been fully investigated.

**Target Organs:** No data found.

#### Potential Health Effects

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation. Harmful if absorbed through the skin. May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration. Most nitrile compounds are well absorbed through intact skin, and may cause delayed onset of symptoms following exposure by this route.

**Ingestion:** Harmful if swallowed. May cause irritation of the digestive tract. Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness and possible death.

**Inhalation:** May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. May be metabolized to cyanide which in turns act by inhibiting cytochrome oxidase impairing cellular respiration. Inhalation may result in symptoms similar to cyanide poisoning which include tachypnea, hyperpnea (abnormally rapid or deep breathing), and dyspnea (labored breathing) followed rapidly by respiratory depression. Pulmonary edema may occur.

**Chronic:** May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration. Exposure to small amounts of cyanide compounds over long periods of time is reported to cause loss of appetite, headache, weakness, nausea, dizziness, and symptoms of irritation of the upper respiratory tract and eyes.

### Section 4 - First Aid Measures

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**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. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Combustion by-products include oxides of nitrogen and hydrogen cyanide.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

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

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 1; 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:** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**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 |
|---------------------------|-------------|-------------|-------------------|
| 2,6-Dimethoxybenzonitrile | none listed | none listed | none listed       |

**OSHA Vacated PELs:** 2,6-Dimethoxybenzonitrile: 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:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder

**Appearance:** light beige

**Odor:** none reported

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 310 deg C @ 760 mm Hg

**Freezing/Melting Point:** 119 - 123 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Not available.

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

**Molecular Formula:** C<sub>9</sub>H<sub>9</sub>NO<sub>2</sub>

**Molecular Weight:** 163.18

## Section 10 - Stability and Reactivity

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

**Conditions to Avoid:** Dust generation, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong acids, strong bases.

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

**Hazardous Polymerization:** Has not been reported

## Section 11 - Toxicological Information

### RTECS#:

CAS# 16932-49-3: DI4355400

### LD50/LC50:

Not available.

### Carcinogenicity:

CAS# 16932-49-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** No information found

**Reproductive Effects:** No information found

**Mutagenicity:** No information found

**Neurotoxicity:** No information found

**Other Studies:**

|                                     |
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| Section 12 - Ecological Information |
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No information available.

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| Section 13 - Disposal Considerations |
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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 SOLID, ORGANIC, N.O.S. | No information available. |
| <b>Hazard Class:</b>  | 6.1                          |                           |
| <b>UN Number:</b>     | UN2811                       |                           |
| <b>Packing Group:</b> | III                          |                           |

|                                     |
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| Section 15 - Regulatory Information |
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**US FEDERAL****TSCA**

CAS# 16932-49-3 is not listed on the TSCA inventory. It is for research and development use only.

**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**

None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**Section 313** No chemicals are reportable under Section 313.**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**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# 16932-49-3 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations****European Labeling in Accordance with EC Directives****Hazard Symbols:**

XN

**Risk Phrases:**

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

**Safety Phrases:**

S 36/37 Wear suitable protective clothing and gloves.

**WGK (Water Danger/Protection)**

CAS# 16932-49-3: No information available.

**Canada - DSL/NDSL**

None of the chemicals in this product are listed on the DSL or NDSL list.

**Canada - WHMIS**

not available.

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.

Section 16 - Additional Information

**MSDS Creation Date:** 9/02/1997

**Revision #7 Date:** 3/22/2006

*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.*