

# Material Safety Data Sheet

## 4-Aminobenzyl cyanide, 99%

ACC# 32437

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 4-Aminobenzyl cyanide, 99%

**Catalog Numbers:** AC103210000, AC103210100

**Synonyms:** 4-Aminophenylacetonitrile; 4-Aminobenzyl cyanide.

**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 |
|-----------|-----------------------|---------|---------------|
| 3544-25-0 | 4-Aminobenzyl cyanide | 99      | 222-587-4     |

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: yellow to brown crystalline powder.

**Warning!** May be harmful if swallowed, inhaled, or absorbed through the skin. May cause eye and skin irritation. May cause respiratory tract irritation.

**Target Organs:** No data found.

#### Potential Health Effects

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation. May be harmful if absorbed through the skin.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.

**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.

**Chronic:** May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration. Chronic exposure to cyanide solutions may lead to the development of a "cyanide" rash, characterized by itching, and by macular, papular, and vesicular eruptions, and may be accompanied by secondary infections. 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. Combustion generates toxic fumes. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

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

**Flash Point:** > 110 deg C (> 230.00 deg F)

**Autoignition Temperature:** Not available.

**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. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Avoid breathing dust.

**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                                     |
|-----------------------|-------------|-------------|---|
| 4-Aminobenzyl cyanide | none listed | none listed | 5 mg/m <sup>3</sup> TWA (listed under Cyanide anion). |

**OSHA Vacated PELs:** 4-Aminobenzyl cyanide: 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:** Crystalline powder

**Appearance:** yellow to brown

**Odor:** Not available.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** 4.6

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 312 deg C @ 760 mm Hg

**Freezing/Melting Point:** 44-48 deg C

**Decomposition Temperature:** Not available.

**Solubility:** slightly soluble

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

**Molecular Formula:** C<sub>8</sub>H<sub>8</sub>N<sub>2</sub>

**Molecular Weight:** 132.16

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Dust generation.

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

**Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, carbon dioxide, cyanides.

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

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 3544-25-0 unlisted.

**LD50/LC50:**

Not available.

**Carcinogenicity:**

CAS# 3544-25-0: 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:**

## Section 12 - Ecological Information

**Ecotoxicity:** Bacteria: Phytobacterium phosphoreum: EC50 = 0.36-0.40 mg/L; 5,15,30 minutes; Microtox test; 15 degrees C

## 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> | DOT regulated - small quantity provisions apply (see 49CFR173.4) | NITRILES SOLID TOXIC NOS (4-AMINOBENZYL CYANIDE) |
| <b>Hazard Class:</b>  |  | 6.1  |
| <b>UN Number:</b>     |  | UN3276   |
| <b>Packing Group:</b> |  | III  |

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 3544-25-0 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 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. CAS# 3544-25-0 is listed as a Priority Pollutant under the Clean Water Act. CAS# 3544-25-0 is listed as a Toxic Pollutant under the Clean Water Act.

#### OSHA:

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

#### STATE

CAS# 3544-25-0 can be found on the following state right to know lists: California, (listed as Cyanides, inorganic salts), New Jersey, (listed as Cyanide anion), Pennsylvania, (listed as Cyanide anion), Massachusetts, (listed as Cyanide anion).

#### 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# 3544-25-0: 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.

#### Canadian Ingredient Disclosure List

CAS# 3544-25-0 (listed as Cyanides, inorganic salts) is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 7/07/1999

**Revision #3 Date:** 10/05/2004

*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.*