Material Safety Data Sheet

Succinonitrile, 99+%

ACC# 04688

Section 1 - Chemical Product and Company Identification

MSDS Name: Succinonitrile, 99+%

Catalog Numbers: AC171180000, AC171180050, AC171181000, AC171185000

Synonyms: Butanedinitrile; s-Dicyanoethane; Ethane, 1,2-dicyano-; Ethylene cyanide; Ethylene dicyanide; Succinic acid dinitrile;

Succinic dinitrile; Succinodinitrile

Company Identification:

Acros Organics N.V.

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
110-61-2	Succinonitrile	99+	203-783-9

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: not available waxy solid.

Caution! Harmful if inhaled. Causes severe eye and skin irritation. May be harmful if swallowed. Causes digestive and respiratory tract irritation. This substance has caused adverse reproductive and fetal effects in animals.

Target Organs: No data found.

Potential Health Effects

Eye: Causes severe eye irritation.

Skin: Causes severe skin irritation. May cause itching.

Ingestion: Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. May cause itching. May cause convulsions and blurred vision.

Inhalation: May cause nausea, dizziness, and headache. Harmful if inhaled. May cause itching. May cause convulsions and blurred

vision.

Chronic: Not available.

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 imme diately.

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

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

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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. 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 carbon dioxide, dry chemical powder or appropriate foam.

Flash Point: 132 deg C (269.60 deg F) 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: Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood. Do not breathe dust.

Storage: Keep containers tightly closed. Store in a cool, dry 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 general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Succinonitrile	none listed	6 ppm TWA; 20 mg/m3 TWA	none listed

OSHA Vacated PELs: Succinonitrile: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear safety glasses and chemical goggles if splashing is possible.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure. **Clothing:** Wear appropriate protective clothing to minimize contact with skin.

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: Waxy solid Appearance: not available Odor: None reported. pH: Not available.

Vapor Pressure: 0.98 mmHg @ 100

Vapor Density: 2.1

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 265.0 - 267.0 deg C @ 760.00m

Freezing/Melting Point:57 deg C

Decomposition Temperature:> 195 deg C

Solubility: slightly soluble

Specific Gravity/Density:1.022g/cm3

Molecular Formula:C4H4N2 Molecular Weight:80.09

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, oxidizers.

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

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide, cyanide fumes.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 110-61-2: WN3850000

LD50/LC50: CAS# 110-61-2:

Oral, mouse: LD50 = 129 mg/kg; Oral, rat: LD50 = 450 mg/kg;

Carcinogenicity:

CAS# 110-61-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found

Teratogenicity: Teratogenic effects have occurred in experimental animals.

Reproductive Effects: No information found Mutagenicity: No information found Neurotoxicity: No information found

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: No data available.

Physical: No data available.

Other: None.

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
Shipping Name:	NOT REGULATED FOR DOMESTIC TRANSPORT	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 110-61-2 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

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# 110-61-2 can be found on the following state right to know lists: New Jersey, Minnesota.

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 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 28A After contact with skin, wash immediately with plenty of water

WGK (Water Danger/Protection)

CAS# 110-61-2: No information available.

Canada - DSL/NDSL

CAS# 110-61-2 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D1B, 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

Section 16 - Additional Information

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.