

# MATERIAL SAFETY DATA SHEET

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** 1,1'-Azobis(N,N-Dimethylformamide), 98%  
**Catalog Numbers:** AC185710000, AC185710010, AC185712500  
**Synonyms:** Diazenedicarboxamide, Tetramethyl-; N,N,N',N'-Tetramethylazoforamide; Tetramethyldiazenedicarboxamide.

**Company Identification:** Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

**Company Identification: (USA)** Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**For information in the US, call:** 800-ACROS-01  
**For information in Europe, call:** +32 14 57 52 11  
**Emergency Number, Europe:** +32 14 57 52 99  
**Emergency Number US:** 201-796-7100  
**CHEMTREC Phone Number, US:** 800-424-9300  
**CHEMTREC Phone Number, Europe:** 703-527-3887

## Section 2 - Composition, Information on Ingredients

CAS#: 10465-78-8  
Chemical Name: 1,1'-Azobis(N,N-Dimethylformamide)  
%: 98  
EINECS#: 233-951-7

**Hazard Symbols:** None listed

**Risk Phrases:** None listed

## Section 3 - Hazards Identification

### EMERGENCY OVERVIEW

Caution! The toxicological properties of this material have not been fully investigated. May cause eye, skin, and respiratory tract irritation. Target Organs: No data found.

#### Potential Health Effects

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation.

**Ingestion:** May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

**Inhalation:** May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

**Chronic:** No information found.

## Section 4 - First Aid Measures

**Eyes:** 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 not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:**

### 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.

**Extinguishing Media:** Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Autoignition:** Not applicable.

**Temperature:**

**Flash Point:** Not applicable.

**Explosion Limits:** Not available

**Lower:**

**Explosion Limits:** Not available

**Upper:**

**NFPA Rating:** health: 1; 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:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. 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. Deep freeze (below -20°C).

### 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			
1,1'-Azobis(N,N-Dimethylformamide)	none listed	none listed	none listed
ethylformamide)			

OSHA Vacated PELs: 1,1'-Azobis(N,N-Dimethylformamide): None listed

**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:** Solid  
**Color:** bright yellow  
**Odor:** none reported  
**pH:** Not available  
**Vapor Pressure:** Not available  
**Vapor Density:** Not available  
**Evaporation Rate:** Not available  
**Viscosity:** Not available  
**Boiling Point:** Not available  
**Freezing/Melting Point:** 113.00 - 115.00 deg C  
**Decomposition Temperature:** Not available  
**Solubility in water:** Not available  
**Specific Gravity/Density:**  
**Molecular Formula:** C6H12N4O2  
**Molecular Weight:** 172.19

### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials, dust generation, excess heat, strong oxidants.  
**Incompatibilities with Other Materials:** Not available  
**Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, oxides of sulfur, irritating and toxic fumes and gases, carbon dioxide.  
**Hazardous Polymerization:** Has not been reported.

### Section 11 - Toxicological Information

**RTECS#:** CAS# 10465-78-8: LQ1041000  
**LD50/LC50:** RTECS: Not available.  
**Carcinogenicity:** 1,1'-Azobis(N,N-Dimethylformamide) - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
**Epidemiology:** No information found  
**Teratogenicity:** No information found  
**Reproductive:** No information found  
**Neurotoxicity:** No information found  
**Mutagenicity:** No information found  
**Other:** Not available

### Section 12 - Ecological Information

Not 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  
Shipping Name: Not regulated as a hazardous material  
Hazard Class:  
UN Number:  
Packing Group:  
Canada TDG  
Shipping Name: Not available  
Hazard Class:  
UN Number:  
Packing Group:

## Section 15 - Regulatory Information

### US Federal

#### TSCA

CAS# 10465-78-8 is not listed on the TSCA Inventory. It is for research and development use only.

<b>Health &amp; Safety Reporting List</b>	None of the chemicals are on the Health & Safety Reporting List.
<b>Chemical Test Rules Section 12b</b>	None of the chemicals in this product are under a Chemical Test Rule.
<b>TSCA Significant New Use Rule</b>	None of the chemicals are listed under TSCA Section 12b.
<b>CERCLA Hazardous Substances and corresponding RQs</b>	None of the chemicals in this material have a SNUR under TSCA.
<b>SARA Section 302 Extremely Hazardous Substances</b>	None of the chemicals in this material have an RQ.
<b>Section 313</b>	None of the chemicals in this product have a TPQ.
<b>Clean Air Act:</b>	No chemicals are reportable under Section 313.
<b>Clean Water Act:</b>	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.
<b>OSHA:</b>	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.
<b>STATE</b>	1,1'-Azobis(N,N-Dimethylformamide) is not present on state lists from CA, PA, MN, MA, FL, or NJ.
<b>California Prop 65</b>	
<b>California No Significant Risk Level:</b>	None of the chemicals in this product are listed.
<b>European/International Regulations</b>	

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

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

S 37 Wear suitable gloves.

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# 10465-78-8: Not available

Canada

Canadian WHMIS Classifications: 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.

CAS# 10465-78-8 is not listed on Canada's Ingredient Disclosure List.

**Section 16 - Other 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 the company 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 the company has been advised of the possibility of such damages.