

# Material Safety Data Sheet

## N,N-Dimethylacetamide

ACC# 96035

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** N,N-Dimethylacetamide

**Catalog Numbers:** AC115690000, AC115690010, AC115690025, AC115690050, AC167780000, AC167780010 AC167780010, AC167782500, AC181070000, AC181070010, AC181070025, AC181070050 AC181070050, AC378710000, AC378710010, AC378710025

**Synonyms:**

**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
127-19-5	N,N-Dimethylacetamide	>98%	204-826-4

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

**Appearance:** colorless clear liquid. **Flash Point:** 70 deg C.

Hygroscopic (absorbs moisture from the air).

**Target Organs:** Kidneys, liver, nerves.

#### Potential Health Effects

**Eye:** May cause eye irritation.

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

**Ingestion:** May cause irritation of the digestive tract. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. May cause auditory and visual hallucinations, disorientation, sweating, and weakness.

**Inhalation:** Harmful if inhaled. May cause respiratory tract irritation. Inhalation of vapors may cause nausea, vomiting, dizziness, and loss of consciousness. DMAC concentrations between 0 and 2 ppm, with occasional excursions between 11 and 34 ppm, in a polymer manufacturing operation caused dizziness, lethargy, and weakness.

**Chronic:** Not available. Repeated dermal applications to dogs of DMAC at 4 mg/kg body weight for 6 weeks produced extensive fatty infiltration of liver tissue. Daily exposure of rats at 195 ppm DMAC for 6 months produced liver damage.

### 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.

**Ingestion:** Get medical aid. Wash mouth out with 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:** 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. Will burn if involved in a fire. Combustible liquid.

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

**Flash Point:** 70 deg C ( 158.00 deg F)

**Autoignition Temperature:** 490 deg C ( 914.00 deg F)

**Explosion Limits, Lower:** 1.7 Vol %

**Upper:** 11.5 Vol %

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

### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Provide ventilation.

### Section 7 - Handling and Storage

**Handling:** Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Use only in a chemical fume hood.  
**Storage:** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Keep under a nitrogen blanket.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** 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
N,N-Dimethylacetamide	10 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route	10 ppm TWA; 35 mg/m <sup>3</sup> TWA 300 ppm IDLH	10 ppm TWA; 35 mg/m <sup>3</sup> TWA

**OSHA Vacated PELs:** N,N-Dimethylacetamide: 10 ppm TWA; 35 mg/m<sup>3</sup> TWA

### Personal Protective Equipment

**Eyes:** Not available.

**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:** Clear liquid

**Appearance:** colorless

**Odor:** ammonia-like

**pH:** 4 (200 g/l aq. sol.)

**Vapor Pressure:** 1.7mbar @25 deg C

**Vapor Density:** 3.02 (air=1)

**Evaporation Rate:**0.17 (butyl acetate=1)

**Viscosity:** 1.02 mPa s @20 deg C

**Boiling Point:** 164 - 166 deg C @760mmHg

**Freezing/Melting Point:**-20 deg C

**Decomposition Temperature:**Not available.

**Solubility:** Soluble.

**Specific Gravity/Density:**0.937

**Molecular Formula:**C4H9NO

**Molecular Weight:**87.12

## Section 10 - Stability and Reactivity

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

**Conditions to Avoid:** Incompatible materials, exposure to moist air or water, heat.

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

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

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

### RTECS#:

**CAS#** 127-19-5: AB7700000

### LD50/LC50:

CAS# 127-19-5:

Draize test, rabbit, eye: 100 mg Mild;  
Inhalation, mouse: LC50 = 7200 mg/m<sup>3</sup>;  
Inhalation, rat: LC50 = 2475 ppm/1H;  
Oral, mouse: LD50 = 4620 mg/kg;  
Oral, rat: LD50 = 4300 mg/kg;  
Skin, rabbit: LD50 = 2240 mg/kg;  
Skin, rat: LD50 = >2 gm/kg;

### Carcinogenicity:

CAS# 127-19-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductive Effects:** No data available.

**Mutagenicity:** No data available.

**Neurotoxicity:** No data available.

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** Daphnia: Daphnia: LC50 = 3400 mg/L; 48h; . Log Pow: -0.8

**Environmental:** No information available.

**Physical:** No information available.

**Other:** Biodegradable.

## 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 LIQUIDS, ORGANIC, N.O.S.	Toxic, Liquid, Organic, N.O.S.
<b>Hazard Class:</b>	6.1	6.1
<b>UN Number:</b>	UN2810	UN2810
<b>Packing Group:</b>	III	III

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 127-19-5 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

CAS# 127-19-5: Testing required by manufacturers, processors

#### Section 12b

CAS# 127-19-5: Section 4

#### 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.

#### SARA Codes

CAS # 127-19-5: immediate, delayed, fire.

#### 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.

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# 127-19-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

#### 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:

T

#### Risk Phrases:

R 20/21 Harmful by inhalation and in contact with skin.

R 61 May cause harm to the unborn child.

#### Safety Phrases:

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

S 53 Avoid exposure - obtain special instructions before use.

#### WGK (Water Danger/Protection)

CAS# 127-19-5: 1

**Canada - DSL/NDSL**

CAS# 127-19-5 is listed on Canada's DSL 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# 127-19-5 is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 11/14/1997

**Revision #7 Date:** 1/21/2005

*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.*