

# Material Safety Data Sheet

## 1-Methylpiperazine, 99+% (gc)

ACC# 65573

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 1-Methylpiperazine, 99+% (gc)

**Catalog Numbers:** AC156910000, AC156910050, AC156911000, AC156915000

**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 |
|----------|--------------------|---------|---------------|
| 109-01-3 | 1-Methylpiperazine | 98%     | 203-639-5     |

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: Not available. Flash Point: 42 deg C.

**Danger!** Causes severe eye and skin irritation with possible burns. Corrosive. **Flammable liquid and vapor.** May be harmful if absorbed through the skin. Causes digestive and respiratory tract irritation. May cause central nervous system depression. Hygroscopic (absorbs moisture from the air).

**Target Organs:** Central nervous system.

#### Potential Health Effects

**Eye:** Causes eye irritation and possible burns.

**Skin:** Causes skin burns. May be harmful if absorbed through the skin.

**Ingestion:** Causes digestive tract irritation.

**Inhalation:** Inhalation of vapor may cause respiratory tract irritation. Vapors may cause dizziness or suffocation. Causes corrosive action on the mucous membranes. Inhalation may produce burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

**Chronic:** Not available.

### 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 immediately.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further exposure. Remove contaminated clothing and shoes.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**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. Vapors may form an explosive mixture with air. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. May be ignited by heat, sparks, and flame.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

**Flash Point:** 42 deg C ( 107.60 deg F)

**Autoignition Temperature:** Not available.

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

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; 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. Avoid runoff into storm

sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces.

## Section 7 - Handling and Storage

**Handling:** Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

| Chemical Name      | ACGIH       | NIOSH       | OSHA - Final PELs |
|--------------------|-------------|-------------|-------------------|
| 1-Methylpiperazine | none listed | none listed | none listed       |

**OSHA Vacated PELs:** 1-Methylpiperazine: 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:** Solid

**Appearance:** Not available.

**Odor:** amine-like

**pH:** Not available.

**Vapor Pressure:** 122 hPa @20C

**Vapor Density:** Not available.

**Evaporation Rate:**Not available.

**Viscosity:** Not available.

**Boiling Point:** 138 deg C

**Freezing/Melting Point:**65.5 deg F

**Decomposition Temperature:**Not available.

**Solubility:** miscible with water

**Specific Gravity/Density:**.9030g/cm3

**Molecular Formula:**C5H12N2

**Molecular Weight:**100.16

## Section 10 - Stability and Reactivity

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

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat, strong oxidants, moist air.

**Incompatibilities with Other Materials:** Strong oxidizing agents.

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

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

## Section 11 - Toxicological Information

### RTECS#:

**CAS#** 109-01-3: TM1225000

### LD50/LC50:

**CAS#** 109-01-3:

Draize test, rabbit, eye: 750 ug/24H Severe;

Draize test, rabbit, skin: 5 mg/24H Severe;

Inhalation, mouse: LC50 = 2740 mg/m3/2H;

Oral, mouse: LD50 = 1450 mg/kg;

Oral, rat: LD50 = 2830 uL/kg;

Skin, rabbit: LD50 = 1490 uL/kg;

### Carcinogenicity:

**CAS#** 109-01-3: 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

No information 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                                       | Canada TDG                |
|-----------------------|--|---------------------------|
| <b>Shipping Name:</b> | AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. | No information available. |
| <b>Hazard Class:</b>  | 8  |                           |
| <b>UN Number:</b>     | UN2734                                       |                           |
| <b>Packing Group:</b> | II   |                           |

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 109-01-3 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 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# 109-01-3 can be found on the following state right to know lists: Pennsylvania, 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:

XI

#### Risk Phrases:

R 10 Flammable.

R 21 Harmful in contact with skin.

R 36/37/38 Irritating to eyes, respiratory system and skin.

#### Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 24/25 Avoid contact with skin and eyes.

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

S 33 Take precautionary measures against static discharges.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face pr

otection.

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

S 9 Keep container in a well-ventilated place.

S 50A Do not mix with acids.

**WGK (Water Danger/Protection)**

CAS# 109-01-3: 1

**Canada - DSL/NDSL**

CAS# 109-01-3 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of B3, E.

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:** 8/28/1998

**Revision #3 Date:** 10/03/2005

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