



Material Safety Data Sheet

Malonic acid

MSDS# 00915

Section 1 - Chemical Product and Company Identification

MSDS Name: Malonic acid

Catalog Numbers: AC125260000, AC125260010, AC125260050, AC125262500, A170-100

Synonyms: Carboxyacetic acid; Dicarboxymethane; 1,3-Propanedioic acid; Methane dicarboxylic acid; Methanedicarbonic acid.

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#: 141-82-2  
Chemical Name: Malonic acid  
%: >99  
EINECS#: 205-503-0

Hazard Symbols: XN



Risk Phrases: 22 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! May be harmful if swallowed. Causes eye, skin, and respiratory tract irritation. Target Organs: Respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation.

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

Inhalation: Causes respiratory tract irritation.

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 immediately.

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

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. 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:

#### 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. Dusts at sufficient concentrations can form explosive mixtures with air.

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

Autoignition Temperature: Not available

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: 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 or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions.

#### 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. Avoid breathing dust.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

#### Section 8 - Exposure Controls, Personal Protection

| Chemical Name | ACGIH       | NIOSH       | OSHA - Final PELs |
|---------------|-------------|-------------|-------------------|
| Malonic acid  | none listed | none listed | none listed       |

OSHA Vacated PELs: Malonic acid: None listed

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

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: Crystals

Color: white

Odor: None reported.

pH: Not available

Vapor Pressure: Negligible.

Vapor Density: Not available

Evaporation Rate: Negligible.

Viscosity: Not available

Boiling Point: decomposes

Freezing/Melting Point: 133-137 deg C

Decomposition Temperature: Not available

Solubility in water: Soluble

Specific Gravity/Density: 1.63

Molecular Formula: C3H4O4

Molecular Weight: 104.06

## Section 10 - Stability and Reactivity

|  |  |
|--|--|
| Chemical Stability:                    | Stable under normal temperatures and pressures.  |
| Conditions to Avoid:                   | Dust generation, excess heat.                    |
| Incompatibilities with Other Materials | Strong oxidizing agents, strong reducing agents. |
| Hazardous Decomposition Products       | Carbon monoxide, carbon dioxide.                 |
| Hazardous Polymerization               | Has not been reported.                           |

## Section 11 - Toxicological Information

|                  |   |
|------------------|---|
| RTECS#:          | CAS# 141-82-2: OO0175000  |
|                  | RTECS:  |
|                  | <b>CAS# 141-82-2:</b> Draize test, rabbit, eye: 100 mg Severe;                |
|                  | Draize test, rabbit, skin: 500 mg/24H Mild;                                   |
| LD50/LC50:       | Inhalation, rat: LC50 = >8900 mg/m <sup>3</sup> /1H;                          |
|                  | Oral, mouse: LD50 = 4 gm/kg;  |
|                  | Oral, rat: LD50 = 1310 mg/kg;   |
|                  | .   |
| Carcinogenicity: | Malonic acid - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. |
| Other:           | See actual entry in RTECS for complete information.                           |

## Section 12 - Ecological Information

Not available

## Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

US DOT

Shipping Name: Not Regulated

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

## Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

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

Safety Phrases:

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

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 141-82-2: 1

Canada

CAS# 141-82-2 is listed on Canada's DSL List

Canadian WHMIS Classifications: 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.

CAS# 141-82-2 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 141-82-2 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 10/02/1997

Revision #6 Date 7/20/2009

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.

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