# Acetic Acid, 0.2N (0.2M)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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## SECTION 1: Identification

### 1.1. Identification

Product form : Mixtures

Product name : Acetic Acid, 0.2N (0.2M)

Product code : LC10360

### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.

Recommended use : Laboratory chemicals

Restrictions on use : Not for food, drug or household use

### 1.3. Supplier

LabChem, Inc.

1010 Jackson's Pointe Ct.

Zelienople, PA 16063 - USA

T 412-826-5230 - F 724-473-0647

info@labchem.com - www.labchem.com

### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or +1-703-741-5970

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

**GHS US classification**

Skin corrosion/irritation Category 2 H315 Causes skin irritation

Serious eye damage/eye irritation Category 2 H319 Causes serious eye irritation

Full text of H statements : see section 16

### 2.2. GHS Label elements, including precautionary statements

**GHS US labeling**

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary statements (GHS US) : P264 - Wash exposed skin thoroughly after handling.
P280 - Wear protective gloves, eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.

### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None.

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|---|---|---|---|
| Water | (CAS-No.) 7732-18-5 | 98.8 | Not classified |
| Acetic Acid | (CAS-No.) 64-19-7 | 1.2 | Flam. Liq. 3, H226<br>Acute Tox. 4 (Inhalation:vapour), H332<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Aquatic Acute 3, H402 |

Full text of hazard classes and H-statements : see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes eye irritation.

### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.

Explosion hazard : Not applicable.

Reactivity in case of fire : Not applicable.

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it.

#### 6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Gloves.

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Wash hands, forearms and face thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong oxidizers. metals. Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| **Acetic Acid, 0.2N (0.2M)** | |
|---|---|
| No additional information available | |

| **Acetic Acid (64-19-7)** | |
|---|---|
| **USA - ACGIH - Occupational Exposure Limits** | |
| Local name | Acetic acid |
| ACGIH TWA (mg/m³) | 25 mg/m³ |
| ACGIH TWA (ppm) | 10 ppm |
| ACGIH STEL (mg/m³) | 37 mg/m³ |
| ACGIH STEL (ppm) | 15 ppm |
| Remark (ACGIH) | TLV® Basis: URT & eye irr; pulm func |
| Regulatory reference | ACGIH 2020 |
| **USA - OSHA - Occupational Exposure Limits** | |
| Local name | Acetic acid |
| OSHA PEL (TWA) (mg/m³) | 25 mg/m³ |
| OSHA PEL (TWA) (ppm) | 10 ppm |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |
| **USA - IDLH - Occupational Exposure Limits** | |
| US IDLH (ppm) | 50 ppm |
| **USA - NIOSH - Occupational Exposure Limits** | |
| NIOSH REL (TWA) (mg/m³) | 25 mg/m³ |
| NIOSH REL (TWA) [ppm] | 10 ppm |
| NIOSH REL (STEL) (mg/m³) | 37 mg/m³ |
| NIOSH REL (STEL) [ppm] | 15 ppm |

| **Water (7732-18-5)** |
|---|
| No additional information available |

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

### 8.3. Individual protection measures/Personal protective equipment

**Personal protective equipment:**

Safety glasses. Avoid all unnecessary exposure.

**Hand protection:**

Wear protective gloves.

**Eye protection:**

Chemical goggles or safety glasses

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

Respiratory protection not required in normal conditions. Wear appropriate mask

**Personal protective equipment symbol(s):**



**Other information:**

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Color | : | Colorless |
| Odor | : | Vinegar odour |
| Odor threshold | : | No data available |
| pH | : | No data available |
| Melting point | : | No data available |
| Freezing point | : | No data available |
| Boiling point | : | No data available |
| Flash point | : | No data available |
| Relative evaporation rate (butyl acetate=1) | : | No data available |
| Flammability (solid, gas) | : | Non flammable. |
| Vapor pressure | : | No data available |
| Relative vapor density at 20 °C | : | No data available |
| Relative density | : | No data available |
| Specific gravity / density | : | 1 g/ml |
| Solubility | : | Soluble in water. |
| Log Pow | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity, kinematic | : | 1.03 mm²/s |
| Viscosity, dynamic | : | No data available |
| Explosion limits | : | No data available |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions. Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong oxidizers. metals. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| Acetic Acid (64-19-7) | |
|---|---|
| LD50 oral rat | 3310 mg/kg body weight (Rat, Male / female, Experimental value, Oral, 6 day(s)) |
| LC50 Inhalation - Rat | 11.4 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Female, Experimental value, Inhalation (vapours), 14 day(s)) |
| ATE US (oral) | 3310 mg/kg body weight |
| ATE US (vapors) | 11.4 mg/l/4h |
| ATE US (dust, mist) | 11.4 mg/l/4h |

| Water (7732-18-5) | |
|---|---|
| LD50 oral rat | ≥ 90000 mg/kg |
| ATE US (oral) | 90000 mg/kg body weight |

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : 1.03 mm²/s
Likely routes of exposure : Inhalation. Skin and eye contact.
Symptoms/effects after skin contact : Causes skin irritation.
Symptoms/effects after eye contact : Causes eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

| Acetic Acid (64-19-7) | |
|---|---|
| LC50 fish 1 | > 1000 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP) |
| EC50 Daphnia 1 | > 1000 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) |

### 12.2. Persistence and degradability

| Acetic Acid, 0.2N (0.2M) | |
|---|---|
| Persistence and degradability | Not established. |

| Acetic Acid (64-19-7) | |
|---|---|
| Persistence and degradability | Readily biodegradable in the soil. Readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 0.6 – 0.74 g $O_2$/g substance |
| Chemical oxygen demand (COD) | 1.03 g $O_2$/g substance |
| ThOD | 1.07 g $O_2$/g substance |

| Water (7732-18-5) | |
|---|---|
| Persistence and degradability | Not established. |

### 12.3. Bioaccumulative potential

| Acetic Acid, 0.2N (0.2M) | |
|---|---|
| Bioaccumulative potential | Not established. |

| Acetic Acid (64-19-7) | |
|---|---|
| BCF fish 1 | 3.16 (Pisces, Fresh water, QSAR) |
| Log Pow | -0.17 (Experimental value, 25 °C) |
| Bioaccumulative potential | Not bioaccumulative. |

| Water (7732-18-5) | |
|---|---|
| Bioaccumulative potential | Not established. |

### 12.4. Mobility in soil

| Acetic Acid (64-19-7) | |
|---|---|
| Surface tension | 26.3 mN/m (30 °C) |
| Ecology - soil | Highly mobile in soil. May be harmful to plant growth, blooming and fruit formation. |

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

**Department of Transportation (DOT)**

In accordance with DOT

Not regulated

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

**Acetic Acid, 0.2N (0.2M)**

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

| Acetic Acid (64-19-7) | |
|---|---|
| RQ (Reportable quantity, section 304 of EPA's List of Lists) | 5000 lb |
| SARA Section 311/312 Hazard Classes | Physical hazard - Flammable (gases, aerosols, liquids, or solids)<br>Health hazard - Skin corrosion or Irritation<br>Health hazard - Serious eye damage or eye irritation<br>Health hazard - Acute toxicity (any route of exposure) |

### 15.2. International regulations

**CANADA**

| **Acetic Acid (64-19-7)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| **Water (7732-18-5)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

**EU-Regulations**

No additional information available

**National regulations**

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

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Revision date : 10/13/2020

Other information : None.

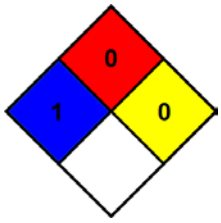
Full text of H-phrases: see section 16:

| | |
|---|---|
| H226 | Flammable liquid and vapor |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H402 | Harmful to aquatic life |

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.




Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : B

B - Safety glasses, Gloves

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