2-Butynoic acid (cas 590-93-2) MSDS

MSDS : 2-Butynoic Acid, 98%
CAS : 590-93-2
SYNONYMS : Tetrolic Acid

Catalog of Chemical Suppliers, Buyers, Custom Synthesis Companies And Equipment Manufacturers
[ 2-Butynoic Acid, 98% 590-93-2 ]

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>590-93-2</td>
<td>2-Butynoic Acid</td>
<td>98</td>
<td>209-695-7</td>
</tr>
</tbody>
</table>

Hazard Symbols: C
Risk Phrases: 34

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW
Causes burns. Corrosive.

Potential Health Effects
Eye:
Causes eye burns.
Skin:
Causes skin burns.
Ingestion:
May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns.
Inhalation:
Causes chemical burns to the respiratory tract.
Chronic:
None

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:
Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).
Skin:
Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.
Ingestion:
Do not induce vomiting. 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 breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.
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 carbon dioxide, dry chemical, or water fog.

**** 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. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:
Minimize dust generation and accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Use with adequate ventilation. Discard contaminated shoes.

Storage:
Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area.

**** 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
CAS# 590-93-2:

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 minimize contact with skin.

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: Powder
Color: white to pale yellow
Odor: Not available.
pH: Not available.
Vapor Pressure: Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: 78-80C
Autoignition Temperature: Not available.
Flash Point: Not available.
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature:
Solubility in water:
Specific Gravity/Density: 
Molecular Formula: C4H4O2 
Molecular Weight: 84.0268

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability: 
Stable at room temperature in closed containers under normal storage and handling conditions.
Conditions to Avoid: 
Incompatible materials, 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# 590-93-2 unlisted.
LD50/LC50: 
Not available.
Carcinogenicity: 
2-Butynoic Acid - 
Not listed by ACGIH, IARC, or NTP.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

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

**** SECTION 14 - TRANSPORT INFORMATION ****

IATA 
Shipping Name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.*
Hazard Class: 8
UN Number: 3261
Packing Group: II
IMO 
Shipping Name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
Hazard Class: 8
UN Number: 3261
Packing Group: II
RID/AD Shipping Name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
Hazard Class: 8
UN Number: 3261
Packing group: II

**** SECTION 15 - REGULATORY INFORMATION ****

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: C
Risk Phrases: 
R 34 Causes burns.
Safety Phrases: 
S 25 Avoid contact with eyes.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
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# 590-93-2: No information available.
Canada
CAS# 590-93-2 is listed on Canada’s NDSL List.
CAS# 590-93-2 is not listed on Canada’s Ingredient Disclosure List.
US FEDERAL
TSCA
CAS# 590-93-2 is listed on the TSCA inventory.

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 2/03/1999 Revision #3 Date: 6/23/2003

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 way 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.