Material Safety Data Sheet
Nitrilotriacetic Acid MSDS# 90652

Section 1 - Chemical Product and Company Identification

MSDS Name: Nitrilotriacetic Acid
Catalog Numbers: 
Synonyms: Aminotriacetic Acid; N,N-Bis (Carboxymethyl)Glycine; Triglycine; Triglycollamic Acid; Chel NTA.
Company Identification: Fisher Scientific UK
Bishop Meadow Road, Loughborough
Leics. LE11 5RG
For information in Europe, call: (01509) 231166
Emergency Number, Europe: 01509 231166

Section 2 - Composition, Information on Ingredients

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CAS#: 139-13-9
Chemical Name: Nitriloacetic Acid
%
100
EINECS#: 205-355-7

Hazard Symbols: XN
Risk Phrases: 20/21/22 40

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Warning! May be harmful if swallowed. May cause kidney damage. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. May cause cancer based on animal studies. Potential cancer hazard. Target Organs: Kidneys, bladder.

Potential Health Effects
Eye: Dust may cause mechanical irritation.
Skin: Dust may cause mechanical irritation.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May be harmful if swallowed.
Inhalation: Dust is irritating to the respiratory tract.
Chronic: Possible cancer hazard based on tests with laboratory animals. May cause kidney injury.

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 if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.
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.
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 if cough or other symptoms appear. Do NOT use mouth-to-mouth resuscitation.

Notes to
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:
In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

Autoignition Temperature: Not available.
Flash Point: Not available

Explosion Limits:
Lower: Not available
Upper: Not available

NFPA Rating: health: 2; flammability: 0; instability: 0;

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. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

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. Avoid ingestion and inhalation.

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

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitriloacetic Acid</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Nitriloacetic 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: 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: Solid
Color: white
Odor: none reported
pH: 2.3 (saturated)
Vapor Pressure: Negligible.
Vapor Density: Not available
Evaporation Rate: Negligible
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: 241 deg C (465.80°F)
Decomposition Temperature: Not available
Solubility in water: Very slightly soluble in water
Specific Gravity/Density: >1.000
Molecular Formula: N(CH2COOH)3
Molecular Weight: 191.0661

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, dust generation, excess heat.
Incompatibilities with Other Materials: Not available
Hazardous Decomposition Products: Carbon monoxide, oxides of nitrogen, oxides of nitrogen, carbon dioxide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:
CAS# 139-13-9: AJ0175000
RTECS:
LD50/LC50:
Oral, mouse: LD50 = 3160 mg/kg;
Oral, rat: LD50 = 1100 mg/kg;
Carcinogenicity: Nitriloacetic Acid - California: carcinogen, initial date 1/1/88 NTP: Suspect carcinogen IARC: Group 2B carcinogen
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: For more information, see "HANDBOOK OF ENVIRONMENTAL FATE AND EXPOSURE DATA."

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 as a hazardous material
Hazard Class: 
UN Number: 
Packing Group: 
Canada TDG
Shipping Name: Not available
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 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R 40 Limited evidence of a carcinogenic effect.
Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 28 After contact with skin, wash immediately with...
WGK (Water Danger/Protection)
CAS# 139-13-9: 2

Canada
CAS# 139-13-9 is listed on Canada's DSL List
Canadian WHMIS Classifications: D2A, 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# 139-13-9 is listed on Canada's Ingredient Disclosure List

US Federal
TSCA
CAS# 139-13-9 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 5/08/1998
Revision #7 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 merchantibility 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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