Safety Data Sheet
N-Aminoethyl-3-aminopropyl-methyl-dimethoxysilane

Section 1. Identification

<table>
<thead>
<tr>
<th>Product Identifier</th>
<th>N-Aminoethyl-3-aminopropyl-methyl-dimethoxysilane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>N/A</td>
</tr>
<tr>
<td>Manufacturer Stock Numbers</td>
<td>A0699</td>
</tr>
<tr>
<td>Recommended use</td>
<td>N/A</td>
</tr>
<tr>
<td>Uses advised against</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Manufacturer Contact

| Address                     | UCT Specialties, LLC  
|                            | 2731 Bartram Rd  
|                            | Bristol, PA, 19007  
|                            | USA |

| Phone                      | (215) 781-9255 |
|                           | (800) 424-9300 |
|                           | (215) 785-1226 |
| Emergency Phone            | CHEMTREC |

| Email                      | manastasio@unitedchem.com |
| Website                    | www.unitedchem.com |

Section 2. Hazards Identification

<table>
<thead>
<tr>
<th>Classification</th>
<th>SKIN CORROSION/IRRITATION - Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal Word</td>
<td>Danger</td>
</tr>
<tr>
<td>Pictogram</td>
<td></td>
</tr>
</tbody>
</table>
| **Hazard Statements** | Causes serious eye irritation  
Causes skin irritation  
Harmful if swallowed  
Harmful in contact with skin |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Precautionary Statements</strong></td>
<td></td>
</tr>
</tbody>
</table>
**Response**  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
If on skin: Wash with plenty of water/ ...  
If skin irritation occurs: Get medical advice/attention.  
If swallowed: Immediately call a poison center/doctor  
Specific treatment (see ... on this label)  
Take off contaminated clothing and wash it before reuse.  
**Prevention**  
Wash ...thoroughly after handling.  
Wear protective gloves.  
**Storage**  
N/A  
**Disposal**  
N/A  
**General**  
If medical advice is needed, have product container or label at hand  
Read label before use  
|  
| **Ingredients of unknown toxicity** | 0% |
| **Hazards not Otherwise Classified** |  
**Acute Toxicity**  
Liquid and vapors react with moisture on the skin, eyes and mucous membranes to release a substance that is corrosive.  
**Medical Conditions Aggravated**  
Perclude from exposure those individuals having a history of respiratory illness or pre-existing eye or skin conditions.  
**Acute Toxicity**  
Prolonged or repeated exposure and/or high concentrations of vapors will produce chemical burns and destruction of affected tissues. Respirable vapors or mist are irritating to the upper respiratory tract and bronchi. Inhalation may be fatal as a result of spasm, inflammation and edema of the lungs and larynx. Prolonged or widespread contact may result in the absorption of a potentially harmful amount of material. If ingested, this material may cause severe burns of the mouth, pharynx, esophagus and stomach.  
**Additional Information**  
This productive is corrosive to the eyes, skin and lungs.  
Material contains a primary amine (organic base) which may generate hydroxide anion on contact with water or moisture on the skin, in the eyes or on the mucous membranes. Alkalinity of the material and possible reaction of the amine group with tissues components can result in the induction of destruction and necrosis in exposed tissues. Primary organic amines may also be potential sensitizers, including hypersensitivity reactions on contact with the skin.  
Hydroxide and amine are destructive to tissues of the skin, eye and mucous membranes. Inhalation may be fatal as a result of spasm, inflammation or |
Section 3. Ingredients

<table>
<thead>
<tr>
<th>CAS</th>
<th>Ingredient Name</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>3069-29-2</td>
<td>N-Aminoethyl-3-aminopropyl-methyl-dimethoxysilane</td>
<td>Unknown</td>
</tr>
<tr>
<td>67-56-1</td>
<td>Methanol</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

General Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area

Eye Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Skin Scrub with soap and water. Remove contaminated clothing and shoes.

Ingestion Get medical attention

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Comments If symptoms persist, get medical attention. Never give anything by mouth to an unconscious person.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media CO2, foam, dry chemical

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Unsuitable Extinguishing Media N/A

Section 6. Accidental Release Measures

General Procedure Absorb spill material with suitable chemical binder. Shovel absorbent into suitable waste container. Do not wash into sewer or soil, groundwater or surface water.

Spill Evacuate spill area of non-essential personnel. Ventilate the spill area. Avoid breathing vapor. Wear appropriate personal protective equipment.

Special Protective Equipment Wear appropriate personal protective equipment as specified in section 8.
Section 7. Handling and Storage

Handling
Ground and bond containers when transferring material.

Storage.
Store in a cool and dry place. Store in a tightly sealed container. Protect from heat, direct sunlight and source of ignition. Store away from acidic, alkaline and oxidizing materials. Provide adequate ventilation.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Aminoethyl-3-aminopropyl-methyl-dimethoxysilane</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Methanol</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Personal Protective Equipment
Goggles, Gloves, Face Shield, Respirator

Engineering Controls
Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Eyes and Face
Use chemical goggles and face shield

Skin
Use impervious gloves. Use impervious clothing as necessary to protect against skin contact

Respiratory
Local exhaust required. Mechanical ventilation required. In case of exposure, use appropriate NIOSH approved respiratory protection

Work Hygenic Practices
General industrial hygiene practice

Comments
To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment, in accordance with the OSHA PPE Standard (29 CFR 1910.132), be conducted before using this product.

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless to yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble reacts</td>
</tr>
<tr>
<td>Partition coefficient Water/n-octanol</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC%</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.98</td>
</tr>
<tr>
<td>Density lbs/Gal</td>
<td>N/A</td>
</tr>
<tr>
<td>Pounds per Cubic Foot</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point</td>
<td>90°C</td>
</tr>
</tbody>
</table>
Section 10. Stability and Reactivity

Stability
(Under Normal Conditions) Stable under ordinary conditions of use and storage

Polymerization
Hazardous polymerization will not occur

Conditions to avoid
Avoid contact with heat, sparks or open flame Water and moist air

Incompatible Materials
Oxidizing agents, alkali and acids

Additional Information
Hazardous Decomposition - generates methanol; TLV (skin TWA) 200ppm. Organic amine vapors

Section 11. Toxicological Information

Carcinogenicity
IARC: No
NTP: No
OSHA: No

Comments
No toxicity information available

Additional Information
Material generates methanol on hydrolysis

Methanol: Toxicity Date: ihl-hmn TCLo: 86,000mg/m3; ihl-hum TClo: 300ppm; ihl-rat LC50: 64,000ppm/4hours; orl-hmn LDLo: 428 mg/kg; orl-hum LDLo: 143 mg/kg; orl-man TDLo: 3429 mg/kg; orl-wmn TDlo: 4000 mg/kg; orl-rat LD50: 5638 mg/kg; skn-rbt LD50: 15,800 mg/kg; unk-man LDLo: 868 mg/kg

Irritation Data: eye-rbt 40 mg MOD IRR; skn-rbt 500mg/25 hours MOD IRR

Mehtanol is the subject of a TSCA CHIP a NIOSH Criteria Document, a NIOSH Current Intelligence Bulletin, is a CERCLA Hazardous Substance (RQ=5000#/2270kg), is listed under RCRA (U154) and is a SARA title II Section 313 Toxic Chemical.
Section 12. Ecological Information

Environmental Data
No information available

Section 13. Disposal

Method
Incineration recommended. Follow all federal, state and local regulations

Empty Container
Containers of this material may be hazardous when empty since they retain product residues (liquids). Observe all warnings and precautions listed for this product.

Comments
It is recommended that waste generators determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult with their waste broker and state and local hazardous waste regulations to insure complete and accurate classification. Although not la listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. US EPA guidelines for classification determination are listed on 40CFR Parts 261.3

Section 14. Transport Information

UN Number
N/A

UN Proper Shipping Name
N/A

DOT Classification
N/A

Packing Group
N/A

Section 15. Regulatory Information

TSCA
United States
TSCA (Toxic Substance Control Act)
TSCA Status: Some components are listed on the TSCA inventory

Section 16. Other Information

Revision Date
3/28/2016

Manufacturer Disclaimer
The data in this Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process.

Manufacturer Supplemental Notes
All technical data is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.

Statement
THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS SAFETY DATA SHEET HAVE BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND TO REPRESENT THE BEST OPINION ON THE SUBJECT AS OF THE DATE ON THIS SHEET. HOWEVER, NO WARRENTY, GUARENTEE...
Additional Information

HMIS Rating

Health - 3  
Flammability - 2  
Physical Hazard - 1

NFPA Codes

Health Hazard - 3  
Flammable Hazard - 2  
Reactivity - 1