

# Matrix Scientific

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## SAFETY DATA SHEET

Transportation Emergency: 3E Co. (5025) 800-451-8346

### 1. Product Identification

<b>Name</b>	Diethylaminosulfur trifluoride
<b>Catalog Number</b>	004186
<b>CAS Registry Number</b>	[38078-09-0]
<b>Company</b>	Matrix Scientific
<b>Physical Address</b>	131 Pontiac Business Center Drive Elgin, SC 29045 USA
<b>Telephone/Fax</b>	(803)788-9494/(803)788-9419

### 2. Hazard Identification

**Hazardous Ingredients** Diethylaminosulfur trifluoride

**GHS label elements, including precautionary statements**

Pictogram



Signal word DANGER

Hazard statement(s)

H301	Toxic if swallowed
H226	Flammable liquid and vapour
H302+H312+H332	Flammable liquid and vapour. Harmful in contact with skin
	Harmful if inhaled
H314	Causes severe skin burns and eye damage

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources
	No smoking.
P233	Keep container tightly closed.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/ gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell.

P304+P340 IF INHALED: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.  
P411 Store at temperatures not exceeding 0°C  
P501 Dispose of contents/container to ... [... in accordance with local/regional/national/international regulation (to be specified)].

### 3. Composition, Information or Ingredients

Diethylaminosulfur trifluoride

Synonym DAST

### 4. First Aid Measures

**Eye Contact:** Check for and remove any contact lenses. Immediately flush eyes with clean, running water for at least 15 minutes while keeping eyes open. Cool water may be used. Seek medical attention.

**Skin Contact:** After contact with skin, wash with generous quantities of running water. Gently and thoroughly wash affected area with running water and non-abrasive soap. Cool water may be used. Seek medical attention. Wash any contaminated clothing prior to reusing.

**Inhalation:** Remove the victim from the source of exposure to fresh, uncontaminated air. If victim's breathing is difficult, administer oxygen. Seek medical attention.

**Ingestion:** Do NOT induce vomiting. Wash mouth out with large amounts of water for at least 15 minutes. Seek medical attention.

### 5. Fire-Fighting Measures

**Extinguishing media:** Carbon dioxide, dry chemical powder. **Do Not Use Water**

**Special fire fighting procedures:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual fire and explosion hazards/decomposition of product:** Emits toxic fumes under fire conditions.

### 6. Accidental Release Measures

Immediately evacuate area. Decontamination team should wear protective clothing and breathing apparatus. Spilled material should be cleaned up immediately by mixing with sand or a similar inert absorbent solid. CAUTION This material is extremely moisture sensitive and reacts violently with water with the evolution of corrosive

gases. Sweep up and store in a tightly closed container for disposal. Avoid contact. There have been reports of violent decomposition when this material is heated above 65°

## 7. **Handling and Storage**

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### **Store in Freezer**

Avoid prolonged exposure  
Do not breath dust or vapor.  
Have safety shower and eye wash available.  
Do not get in eyes, on skin or on clothing.  
Keep container tightly closed.  
Storage area should be cold (-12 to -18°C)  
Store in plastic containers (not glass).

### **Do Not Heat above 60°C**

Ensure adequate ventilation during use.  
Use only in a chemical fume hood.  
This material should be handled only by, or under the close supervision of properly qualified people.  
This product is provided solely for the purpose of research and development

## 8. **Exposure Controls and Personal Protection**

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Wear Protective safety goggles.  
Wear chemical-resistant gloves.  
Wear protective clothing and chemical resistant boots.  
Ensure ventilation during use.  
After contact with skin, wash immediately.

## 9. **Physical and Chemical Properties**

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<b>Molecular Formula:</b>	C4H10F3NS
<b>Molecular Weight:</b>	161.19
<b>Boiling point (C):</b>	30-32°/3mm
<b>Density (g/ml):</b>	1.220

## 10. **Stability and Reactivity**

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<b>Incompatibilities:</b>	Strong oxidizing agents
	Strong acids and bases
	Water
	May decompose violently on exposure to moist air or
water. Avoid heat, flames and sparks. There are literature	reports of this material
undergoing explosive	decomposition when heated above 65°C

### **Hazard Decomposition Products**

<b>Carbon</b>	carbon monoxide
	carbon dioxide
<b>Fluorine</b>	hydrogen fluoride
<b>Nitrogen</b>	oxides of nitrogen
<b>Sulfur</b>	oxides of sulfur

## 11. Toxicological Information

To the best of our knowledge the toxicological properties of this product have not been thoroughly investigated. This material reacts with moisture forming corrosive by-products-Risk of internal burns. May cause severe burns in contact with skin. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

## 12. Ecological Information

<b>Mobility:</b>	Data not known
<b>Persistence and degradability:</b>	No data available
<b>Cumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available

## 13. Disposal Considerations

Observe all federal, state and local laws.

## 14. Transport Information

<b>Shipping Name</b>	Corrosive liquid, flammable, n.o.s.
<b>Class / Sub-Class</b>	8 / 3
<b>UN Number</b>	UN2920
<b>Packing Group</b>	I
<b>Inhalation Hazard Zone</b>	

## 15. Regulatory Information

Adhere to all Federal, State and local regulations.

## 16. Other Information

The information contained herein is accurate to the best of our knowledge, but is not meant to be complete and is included only as a guide. the end user is responsible for any damage resulting from handling or from contact with this product.