1 Identification

Product identifier
Product name: Tris(dimethylamino)silane
Stock number: 43069
CAS Number: 15112-89-7

Relevant identified uses of the substance or mixture and uses advised against.
Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
39 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-345-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.alfa.com

Information Department: Health, Safety and Environmental Department
Emergency telephone number:
During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) Identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)

<table>
<thead>
<tr>
<th>GHS02</th>
<th>Flame</th>
<th>Flam. Liq. 3 H226 Flammable liquid and vapour.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS07</td>
<td>Skin Irrit. 2 H315 Causes skin irritation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eye Irrit. 2A H319 Causes serious eye irritation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STOT SE 3 H335 May cause respiratory irritation.</td>
<td></td>
</tr>
</tbody>
</table>

Label elements
GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms
GHS02 Flame
GHS07

Signal word Warning
Hazard statements
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification
B2 - Flammable liquid
D2B - Toxic material causing other toxic effects

Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)

<table>
<thead>
<tr>
<th>Health (acute effects)</th>
<th>Flammability</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable;
vPvB: Not applicable.

3 Composition/Information on ingredients

Chemical characterization: Substances
CAS#: Description: 15112-89-7 Tris(dimethylamino)silane

4 First-aid measures

Description of first aid measures
After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.

(Contd. on page 2)
Seek immediate medical advice.
**After skin contact**
Immediately wash with water and soap and rinse thoroughly.
Seek immediate medical advice.
**After eye contact**
Rinse opened eye for several minutes under running water. Then consult a doctor.
**After swallowing**
Seek medical treatment.

**Information for Doctor**

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

### 5 Fire-fighting measures

**Extinguishing media**
Suitable extinguishing agents: CO₂, sand, extinguishing powder. Do not use water.

Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
- Carbon monoxide
- Carbon dioxide
- Corrosive gases/vapors.

**Advice for firefighters**

Protective equipment: 
Wear self-contained respirator.
Wear fully protective impervious suit.

### 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Keep away from ignition sources.

**Environmental precautions:**
Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up:
Keep away from ignition sources.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

**Prevention of secondary hazards:**
Keep away from ignition sources.

**Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

### 7 Handling and storage

**Handling**

Precautions for safe handling:
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.

Information about protection against explosions and fires:
Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.
Keep ignition sources away.

Conditions for safe storage, including any incompatibilities

Storage
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: No information known.
Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

Specific end use(s): No further relevant information available.

### 8 Exposure controls/personal protection

**Additional information about design of technical systems:**
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

**Control parameters**

Components with limit values that require monitoring at the workplace: Not required.
Additional information: No data.

**Exposure controls**

Personal protective equipment

**General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Maintain an ergonomically appropriate working environment.

**Breathing equipment:**
Use suitable respirator when high concentrations are present.

**Protection of hands:**
Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

**Eye protection:**
Safety glasses

**Body protection:**
Protective work clothing.

### 9 Physical and chemical properties

**Information on basic physical and chemical properties**

**General Information**

**Appearance:**

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Amin-like</td>
</tr>
</tbody>
</table>
10 Stability and reactivity

Reactivity: No information known.
Chemical stability: Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.
Possibility of hazardous reactions: Reacts with water. Develops corrosive gases / fumes.
Conditions to avoid: No further relevant information available.
Incompatible materials: Oxidizing agents, Alcohols. No information known.
Hazardous decomposition products: Carbon monoxide and carbon dioxide, Corrosive gases/vapors.

11 Toxicological information

Information on toxicological effects:
Acute toxicity: No effects known.
LD/LC50 values that are relevant for classification: No data.
Skin irritation or corrosion: Causes skin irritation.
Eye irritation or corrosion: Causes serious eye irritation.
Sensitization: No sensitizing effects known.
Germ cell mutagenicity: No effects known.
Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Reproductive toxicity: No effects known.
Specific target organ system toxicity - repeated exposure: No effects known.
Specific target organ system toxicity - single exposure: May cause respiratory irritation.
Aspiration hazard: No effects known.
Subacute to chronic toxicity: Organic silicon compounds are generally of low toxicity. Those exhibiting moisture sensitivity may be irritating or corrosive on contact.
Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

12 Ecological information

Toxicity:
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Additional ecological information:
General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment.
Results of PBT and vPvB assessment: PBT: Not applicable. vPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal considerations

Waste treatment methods:
Recommendation: Consult state, local or national regulations to ensure proper disposal.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, IMDG, IATA</th>
<th>UN1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN groper shipping name</td>
<td>DOT</td>
<td>Flammable liquids, n.o.s. (Tris(dimethylamino)silane)</td>
</tr>
<tr>
<td>IMDG, IATA</td>
<td>FLAMMABLE LIQUID, N.O.S. (Tris(dimethylamino)silane)</td>
<td></td>
</tr>
</tbody>
</table>

Transport hazard class(es)

DOT

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Flammable liquids.</td>
<td>3</td>
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<tr>
<td>(F1) Flammable liquids</td>
<td>3</td>
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</table>

IMDG, IATA

<table>
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Packing group

DOT, IMDG, IATA

III

Environmental hazards:

Not applicable.

Special precautions for user

Warning: Flammable liquids

Transport/Additional information:

DOT

Marine Pollutant (DOT):

No

Item:

UN "Model Regulation":

UN1993, Flammable liquids, n.o.s. (Tris(dimethylamino)silane), 3, III

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

GHS label elements

The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

GHS label pictograms

GHS02 GHS07

Signal word Warning

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National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

SARA Section 313 (specific toxic chemical listings) Substance is not listed.

California Proposition 65

Prop 65 - Chemicals known to cause cancer Substance is not listed.
Prop 65 - Developmental toxicity, female Substance is not listed.
Prop 65 - Developmental toxicity, male Substance is not listed.

Information about limitation of use:

For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department

Date of preparation / last revision 11/24/2015 / -

Abbreviations and acronyms:

ADR: Accident Européen sur le Transport des Marchandises Dangereuses (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent

(Contd. of page 5)
Product name: Tris(dimethylamino)silane

LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)