1 Identification

Product identifier

Product name: 4-(4,6-Dimethoxy-1,3,5-triazin-2-yl)-4-methylmorpholinium chloride hydrate

Stock number: H26333
CAS Number: 3945-69-5

Relevant uses of the substance or mixture and uses advised against.

Identification use: SU24 Scientific research and development

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 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 numbers:
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)

GHS06 Skull and crossbones
Acute Tox. 3 H301 Toxic if swallowed.

GHS05 Corrosion
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

Hazards not otherwise classified No information known.

Label elements

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

Hazard pictograms

GHS05 GHS06

Signal word Danger

Hazard statements
H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
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.
P601 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification
D2B - Toxic material causing other toxic effects
E - Corrosive material

Classification system

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

HEALTH
Flammability = 1
Physical Hazard = 1

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances
CAS# Description: 3945-69-5 4-(4,6-Dimethoxy-1,3,5-triazin-2-yl)-4-methylmorpholinium chloride hydrate

Additional information:
CAS# for anhydrous form: 3945-69-5

4 First-aid measures

Description of first aid measures

General information Immediately remove any clothing soiled by the product.

(Contd. on page 2)
### 38.2 After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm. 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
Causes severe skin burns.
Causes serious eye damage.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

### 5 Fire-fighting measures

#### Extinguishing media
Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Hydrogen chloride (HCl)

#### 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

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

#### Methods and material for containment and cleaning up:
Use neutralizing agent.
Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation.

#### Prevention of secondary hazards: No special measures required.

#### 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
Handle under dry protective gas. 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:
No information known.

#### 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:
Store away from oxidizing agents.
Store away from strong bases.
Store away from water/moisture.

#### Further information about storage conditions:
Store under dry inert gas.
This product is moisture sensitive.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from humidity and water.

#### 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

#### Eye protection:
Impervious gloves

### (Contd. on page 3)
9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:
Form: Powder

Odor:
Odor threshold: Not determined

\[ \text{pH-value: Not applicable.} \]

Change in condition

Melting point/Melting range: 110-114 °C (230-237 °F)
Boiling point/Boiling range: Not determined
Sublimation temperature / start: Not determined

Flash point:
Flammability (solid, gaseous):
Ignition temperature:
Decomposition temperature:
Auto igniting:

Danger of explosion:
Explosion limits:
Lower: Not determined
Upper: Not determined
Vapor pressure:
Density:
Relative density:
Vapor density:
Evaporation rate:
Solubility in / Miscibility with
Water:
Partition coefficient (n-octanol/water):
Viscosity:

dynamic: Not applicable.

kinematic: Not applicable.

Other information
No further relevant information available.

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
No dangerous reactions known

Conditions to avoid
No further relevant information available.

Incompatible materials:
Oxidizing agents
Bases
Water/moisture

Hazardous decomposition products:
Carbon monoxide and carbon dioxide
Nitrogen oxides
Hydrogen chloride (HCl)

11 Toxicological information

Information on toxicological effects

Acute toxicity:
Dangerous if swallowed.
Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

LD/LC50 values that are relevant for classification: No data

Skin irritation or corrosion:
Causes severe skin burns.

Eye irritation or corrosion:
Causes serious eye damage.

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:
No effects known.

Aspiration hazard:
No effects known.

Subacute to chronic toxicity:
No effects known.

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>UN3261</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, IMDG, IATA</td>
<td>Corrosive solid, acidic, organic, n.o.s. (4-(4,6-Dimethoxy-1,3,5-triazin-2-yl)-4-methylmorpholinium chloride hydrate)</td>
</tr>
<tr>
<td>DOT proper shipping name</td>
<td>CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (4-(4,6-Dimethoxy-1,3,5-triazin-2-yl)-4-methylmorpholinium chloride hydrate)</td>
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</tbody>
</table>

Transport hazard class(es)

<table>
<thead>
<tr>
<th>DOT</th>
<th>Class</th>
<th>8 Corrosive substances.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMDG, IATA</td>
<td>Class</td>
<td>8 (C4) Corrosive substances</td>
</tr>
<tr>
<td>IMDG, IATA</td>
<td>Label</td>
<td>8</td>
</tr>
</tbody>
</table>

Packing group
| DOT, IMDG, IATA | III |
| Unnumbered |

Environmental hazards:
Not applicable.

Special precautions for user
Orthogonal to Corrosive substances

Segregation groups
Acids

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

Transport/Additional information:
DOT Marine Pollutant (DOT): No

UN "Model Regulation": UN3261, Corrosive solid, acidic, organic, n.o.s. (4-(4,6-Dimethoxy-1,3,5-triazin-2-yl)-4-methylmorpholinium chloride hydrate), 8, 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)

Hazard pictograms

GHS05 GHS06

Signal word Danger

Hazard statements
H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary statements
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P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/…
P303+P361+P333 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.

GHS05 GHS06

National regulations
This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.

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 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.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

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 11/23/2015 / -

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the “International Air Transport Association” (IATA)
ICAO: International Civil Aviation Organization
TDG: Technical Instructions by the “International Civil Aviation Organization” (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
HMTS: Hazardous Materials Identification System
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
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)