

Safety Data Sheet acc. to OSHA HCS

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1 Identification

Product identifier

Product name: Thioanisole

**Stock number:** A14846 **CAS Number:** 100-68-5 **EC number:** 202-878-2

Details of the supplier of the safety data sheet Manufacturer/Supplier:

Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.alfa.com
Information Department: Health, Safety and Environmental Department
Fmergency telephone number:

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)



Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Flam. Liq. 4 H227 Combustible liquid.

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



GHS07

Signal word Warning

Hazard statements
H227 Combustible liquid.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
Procautionary statements

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P210 Keep away from flames and hot surfaces. No smoking.

Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves / eye protection / face protection.

Wear protective gloves / eye protection.

Store in a well-ventilated place. Keep cool. Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification
B3 - Combustible liquid
D2B - Toxic material causing other toxic effects



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



ALTH 2 Health (acute effects) = 2
Flammability = 2
ACTIVITY 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: 100-68-5 Thioanisole

Concentration: ≤100%

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## Product name: Thioanisole

Identification number(s): EC number: 202-878-2

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## 4 First-aid measures

Description of first aid measures

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.

Most important symptoms and effects, both acute and delayed Causes skin irritation. Harmful if swallowed.

Training it swallowed. Causes serious eye irritation. May cause an allergic skin reaction. **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling exposed containers. 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
Sulfur oxides (SOx)
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 product to reach sewage system or any water course.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to section 13.
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 18 for information on personal protection equipment.
See Section 18 for disposal information.
Protective Action Criteria for Chemicals
PAC-1: Substance is not listed.
PAC-2: Substance is not listed.
PAC-3: Substance is not listed.

# 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: 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: Store away from oxidizing agents.

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:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: No data

Exposure controls

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.
Do not inhale dust / smoke / mist.
Avoid contact with the eyes and skin.
Maintain an ergonomically appropriate working environment.
Breathing equipment: Use suitable respirator when high concentrations are present.

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Recommended filter device for short term use:
Use a respirator with multi-purpose combination (US) or type ABEK (EN 14387) as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards such as NIOSH (USA) or

Protection of hands:

Not determined.

Not determined.

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: Form:

Liquid Odor: Odor threshold:

pH-value:

Change in condition

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:

-15 °C (5 °F) 188-189 °C (370-372 °F) Not determined 73 °C (163 °F) Not determined Flash point:

Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Not determined Not determined Auto igniting: Not determined. Danger of explosion: Explosion limits: Lower: Upper: Not determined. Not determined Not determined

0.66 hPa

Vapor pressure at 25 °C (77 °F): Density at 20 °C (68 °F): Relative density Vapor density 1.058 g/cm³ (8.829 lbs/gal) Not determined. Not determined.

Evaporation rate
Solubility in / Miscibility with
Water at 20 °C (68 °F):
Partition coefficient (n-octanol/water): Not determined.

0.5 g/l
Partition coefficient (n-octanol/water): Not determined.

Viscosity:
dynamic:
kinematic:
Other information Not determined.

Not determined.

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.

Prestability of hazardous reactions Reacts with strong oxidizing agents

Conditions to avoid No further relevant information available.

Incompatible materials: Oxidizing agents

Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Sulfur oxides (SOx)

# 11 Toxicological information

Information on toxicological effects

Acute toxicity: Harmful if swallowed. The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance

LD/LC50 values that are relevant for classification:

Oral LD50 891 mg/kg (rat)

Skin irritation or corrosion: Causes skin irritation.
Eye irritation or corrosion: Causes serious eye irritation.

Sensitization: May cause an allergic skin reaction.

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.

Carcinogenic categories
OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

## 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.

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## Product name: Thioanisole

## Additional ecological information:

General notes:
Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies. Toxic to aquatic life.

May cause long lasting harmful effects to aquatic life. 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 informati
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DOT, IATA	UN3334
ADN, IMDG	Not applicable
UN proper shipping name DOT, IATA ADR, ADN, IMDG	Aviation regulated liquid, n.o.s. (Thioanisole) Not applicable

Transport hazard class(es)

DOT, IATA

**UN-Number** 

Alb.

9 Miscellaneous dangerous substances and articles Class

Label ADR, ADN, IMDG Not applicable

Class

Packing group DOT, ADR, IMDG IATA Not applicable Environmental hazards: Not applicable

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

Transport/Additional information:

DOT

Quantity limitations On passenger aircraft/rail: 450 L On cargo aircraft only: 450 L Marine Pollutant (DOT):

UN "Model Regulation": Not applicable

## 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



## GHS07

Signal word Warning

Hazard statements
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Precautionary statements

Precautionary statements
P210 Keep away from flames and hot surfaces. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P280 Wear protective gloves / eye protection / face protection.
P280 Wear protective gloves / eye protection / face protection.
P280 Wear protective gloves / eye protection / face protection.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P321 Specific treatment (see on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
Store in a well-ventilated place Keep cool

P403+P235 P501 Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations

National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Non-Domestic Substances List (NDSL).
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.

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## Product name: Thioanisole

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.

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 Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. Conformance with this 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 03/15/2017 / 1

Abbreviations and acronyms:

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
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
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 doose, 50 percent
LD50: Lethal concentration, 50 percent
LD50: Lethal concentration, 50 percent
LD50: Lethal concentration of the American Chemical Society
PMF: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
VPW: 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)
Flam. Liq 4: Flammable liquids — Category 4
Acute Tox. 4: Acute toxicity — Category 4
Acute Tox. 4: Acute toxicity — Category 2
Eye Irit. 24: Serious eye damage/eye irritation — Category 2A
Skin Sens. 1: Skin sensitisation — Category 1

USA