1 Identification

Product identifier

Product name: 2-(Trifluoromethyl)phenothiazine

Stock number: B20919, L11359

CAS Number: 92-30-8

EC number: 202-145-7

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.

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

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)

![GHS07]

Acute Tox. 4 H302 Harmful if swallowed.

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

Signal word Warning

Hazard statements

H302 Harmful if swallowed.

Precautionary statements

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/…/if you feel unwell.

P330 Rinse mouth.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification

D1B - Toxic material causing immediate and serious toxic effects

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

Health (acute effects) = 2

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: 92-30-8 2-(Trifluoromethyl)phenothiazine

Identification number(s): EC number: 202-145-7

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 No further relevant information available.

(Contd. on page 2)
Safety Data Sheet
per OSHA HazCom 2012

Product name: 2-(Trifluoromethyl)phenothiazine

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)
- Sulfur oxides (SOx)
- Hydrogen fluoride (HF)

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.

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

Methods and material for containment and cleaning up:
- Dispose of contaminated material as waste according to section 13.

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
- 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.

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.
- 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:
- Powder

Color: Yellow

Odor: Not determined

Odor threshold: Not determined.

pH-value: Not applicable.

Change in condition
- Melting point/Melting range: 188-190 °C (370-374 °F)
- Boiling point/Boiling range: Not determined
- Sublimation temperature / start: Not determined

Flash point: Not applicable

Flammability (solid, gaseous): Not determined.

Ignition temperature: Not determined

Decomposition temperature: Not determined

Auto igniting: Not determined.

Danger of explosion: Product does not present an explosion hazard.
### 3. Explosion limits:

- **Lower:** Not determined
- **Upper:** Not determined

### 4. Vapor pressure:
- Not applicable.

### 5. Density:
- Not determined.

### 6. Solubility:
- Not applicable.

### 7. 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.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide, nitrogen oxides, sulfur oxides (SOx), hydrogen fluoride.

### 8. Toxicological information

- **Acute toxicity:** Harmful if swallowed.
  - **LD/LC50 values that are relevant for classification:**
    - Oral LD50: 520 mg/kg (mouse)
- **Skin irritation or corrosion:** Irritant to skin and mucous membranes.
- **Eye irritation or corrosion:** Irritating effect.
- **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:** The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals:
  - Behavioral - tremor.
  - Behavioral - rigidity (including catalepsy).
- **Additional toxicological information:** To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

### 9. Ecological information

- **Toxicity:** No further relevant information available.
- **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.

### 10. Transport information

- **UN-Number:** None
- **DOT, IMDG, IATA:** None
- **Transport hazard class(es):** None
- **Class:** None
- **Packing group:** None

### 11. Disposal considerations

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

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**Product name:** 2-(Trifluoromethyl)phenothiazine

**USA**
### 15 Regulatory information

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

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

#### Hazard pictograms

- **GHS07**

**Signal word:** Warning

**Hazard statements**

- **H302** Harmful if swallowed.

**Precautionary statements**

- **P264** Wash thoroughly after handling.
- **P270** Do not eat, drink or smoke when using this product.
- **P301+P312** IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell.
- **P330** Rinse mouth.
- **P501** Dispose of contents/container in accordance with local/regional/national/international 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)** Substances are 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 is not listed.
- Substance is not listed.
- 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:**

- 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 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)