

4-Fluorothiophenol 371-42-6 MSDS

Name:	4-Fluorothiophenol 97% Material Safety Data Sheet
Synonym:	4-Fluorobenzenethio
CAS:	371-42-6

Section 1 - Chemical Product

MSDS Name:4-Fluorothiophenol 97% Material Safety Data Sheet

Synonym:4-Fluorobenzenethio

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
371-42-6	4-Fluorothiophenol	97	206-737-6

Hazard Symbols: XI

Risk Phrases: 10 36/37/38

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Flammable. Irritating to eyes, respiratory system and skin.Stench.Air sensitive.

Potential Health Effects

Eye:

Causes eye irritation. May cause chemical conjunctivitis and corneal damage.

Skin:

Causes skin irritation. May cause cyanosis of the extremities.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts may cause CNS depression.

Inhalation:

Causes respiratory tract irritation. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest.

Chronic:

Effects may be delayed.

Section 4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated

clothing and shoes. Wash clothing before reuse.

Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Cover with an activated carbon adsorbent and place into a closed container for disposal. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Place under an inert atmosphere. A vapor suppressing foam may be used to reduce vapors.

Section 7 - HANDLING and STORAGE

Handling:

Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Store protected from air. Use and store under nitrogen. Use only in a chemical fume hood. Wash clothing before reuse. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Do not expose to air. Store under an inert atmosphere.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits CAS# 371-42-6: Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear liquid

Color: clear, colorless

Odor: stench

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: 164 - 168 deg C

Freezing/Melting Point: Not available.

Autoignition Temperature: Not applicable.

Flash Point: 54 deg C (129.20 deg F)

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: Not available.

Solubility in water: Not available.

Specific Gravity/Density: 1.197

Molecular Formula: C6H5FS

Molecular Weight: 128.16

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions. Air sensitive.

Conditions to Avoid:

Incompatible materials, ignition sources, exposure to air, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Air, strong bases, strong oxidizing agents.

Hazardous Decomposition Products:

Carbon monoxide, oxides of sulfur, carbon dioxide, hydrogen fluoride gas, hydrogen sulfide.

Hazardous Polymerization: Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 371-42-6 unlisted.

LD50/LC50:

Not available.

Carcinogenicity:

4-Fluorothiophenol - Not listed by ACGIH, IARC, or NTP.

Section 12 - ECOLOGICAL INFORMATION

Other No information available.

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - TRANSPORT INFORMATION

IATA

Shipping Name: FLAMMABLE LIQUID, N.O.S.*

Hazard Class: 3

UN Number: 1993

Packing Group: III

IMO

Shipping Name: FLAMMABLE LIQUID, N.O.S.

Hazard Class: 3.3

UN Number: 1993

Packing Group: III

RID/ADR

Shipping Name: FLAMMABLE LIQUID, N.O.S.

Hazard Class: 3

UN Number: 1993

Packing group: III

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 10 Flammable.

R 36/37/38 Irritating to eyes, respiratory system
and skin.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

S 16 Keep away from sources of ignition - No smoking.

S 33 Take precautionary measures against static discharges.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 371-42-6: No information available.

Canada

None of the chemicals in this product are listed on the DSL/NDSL list.

CAS# 371-42-6 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 371-42-6 is not listed on the TSCA inventory.

It is for research and development use only.

SECTION 16 - ADDITIONAL INFORMATION

N/A