

**2-(tert-Butyl)thiophenol** Safety Data Sheet 57611Y0 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 02/13/2018 Version: 1.0

SECTION 1: Identification			
1.1. Identification			
Product form	: Substance		
Substance name	: 2-(tert-Butyl)thiophenol		
CAS No	: 19728-41-7		
Product code	: 5761-1-Y0		
Formula	: C10H14S		
Synonyms	: 2-(tert-Butyl)benzenethiol; 2-(tert-B	utyl)phenyl mercaptan	
Other means of identification	: MFCD00041503		
1.2. Relevant identified uses of the subs	stance or mixture and uses advised a	igainst	
Use of the substance/mixture	: Laboratory chemicals Manufacture of substances Scientific research and development	nt	
1.3. Details of the supplier of the safety	data sheet		
SynQuest Laboratories, Inc. P.O. Box 309 Alachua, FL 32615 - United States of America T (386) 462-0788 - F (386) 462-7097 info@synquestlabs.com	<u>n</u>		
1.4. Emergency telephone number			
Emergency number	: (844) 523-4086 (3E Company - Ace	count 10069)	
SECTION 2: Hazard(s) identification			
2.1. Classification of the substance or m	nixture		
Classification (GHS-US)			
Acute Tox. 4 (Oral)H302 - Harmful if swallowSkin Irrit. 2H315 - Causes skin irritatEye Irrit. 2AH319 - Causes serious eySTOT SE 3H335 - May cause respiratFull text of H-phrases: see section 16	tion ye irritation		
2.2. Label elements			
GHS-US labeling			
Hazard pictograms (GHS-US)	: GHS07		
Signal word (GHS-US)	: Warning		
Hazard statements (GHS-US)	<ul> <li>H302 - Harmful if swallowed</li> <li>H315 - Causes skin irritation</li> <li>H319 - Causes serious eye irritation</li> <li>H335 - May cause respiratory irritation</li> </ul>		
Precautionary statements (GHS-US)	P301+P312 - If swallowed: Call a F P302+P352 - If on skin: Wash with P304+P340 - If inhaled: Remove p P305+P351+P338 - If in eyes: Rins lenses, if present and easy to do. C P312 - Call a POISON CENTER or P321 - Specific treatment (see sup P330 - Rinse mouth	handling when using this product ell-ventilated area ective clothing/eye protection/face protection OISON CENTER or doctor/ physician if you plenty of soap and water erson to fresh air and keep comfortable for b se cautiously with water for several minutes. continue rinsing doctor/physician if you feel unwell plemental first aid instructions on this label)	feel unwell reathing
	P332+P313 - If skin irritation occurs	S. Get medical advice/allention	

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	P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed P405 - Store locked up P501 - Dispose of contents/container to an approved waste disposal plant		
2.3. Other hazards			
Other hazards not contributing to the classification	: Stench.		
2.4. Unknown acute toxicity (GHS US)			
Not applicable			
SECTION 3: Composition/informati	on on ingredients		
3.1. Substance			
Substance type	: Mono-constituent		
Name	Product identifier	%	Classification (GHS-US)
2-(tert-Butyl)thiophenol (Main constituent)	(CAS No) 19728-41-7	<= 100	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Full text of H-phrases: see section 16	·		<u>.</u>
3.2. Mixture			
Not applicable			
SECTION 4: First aid measures			
I.1. Description of first aid measures			
First-aid measures general	: In case of accident or if you feel unv where possible). Move the affected		
First-aid measures after inhalation	: Remove person to fresh air and kee respiration. Get immediate medical		hing. If not breathing, give artificial
First-aid measures after skin contact	: Wash with plenty of soap and water		
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.		
First-aid measures after ingestion		: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get immediate medical advice/attention.	
4.2. Most important symptoms and effe	ects, both acute and delayed		
Symptoms/injuries	: The most important known symptom 2.2) and/or in section 11.	ns and effects are desc	ribed in the labelling (see section
4.3. Indication of any immediate medic	al attention and special treatment need	led	
Freat symptomatically.			
SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: Alcohol resistant foam. Carbon diox appropriate for surrounding fire.	de. Dry powder. Water	spray. Use extinguishing media
5.2. Special hazards arising from the s	ubstance or mixture		
Fire hazard	: Thermal decomposition generates:	Carbon oxides. Sulfur o	oxides.
Explosion hazard	: Risk of explosion if heated under co containers.	nfinement. Use water s	pray or fog for cooling exposed
5.3. Advice for firefighters			
Firefighting instructions	: In case of fire: Evacuate area. Fight	fire remotely due to the	e risk of explosion.
Protection during firefighting	: Wear gas tight chemically protective apparatus. For further information re		
SECTION 6: Accidental release mea			
6.1. Personal precautions, protective equipment and emergency procedures			
General measures	: Evacuate unnecessary personnel. E vapor or spray.	nsure adequate air ver	ntilation. Do not breathe gas, fumes,

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6.1.1. For non-emergency personnel Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level.
6.2. Environmental precautions	

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3.	Methods and material for containment and cleaning up	
For con	tainment	: Stop leak if safe to do so. Dike for recovery or absorb with appropriate material.
Methods for cleaning up		<ul> <li>Take up large spills with pump or vacuum and finish with dry chemical absorbent. Use explosion-proof equipment. Take up small spills with dry chemical absorbent. Sweep or shovel spills into appropriate container for disposal. Ventilate area.</li> </ul>
Other in	formation	: For disposal of solid materials or residues refer to section 13 : "Disposal considerations".
6.4.	Reference to other sections	
No additional information available		

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe fumes, mist, spray, vapors. Wear personal protective equipment. Avoid contact with skin and eyes.	
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, including	2. Conditions for safe storage, including any incompatibilities	
Technical measures	: Comply with applicable regulations.	
Storage conditions	: Keep container closed when not in use. Air sensitive. Keep contents under inert gas.	
Incompatible materials	: Refer to Section 10 on Incompatible Materials.	
Storage area	: Store in dry, cool, well-ventilated area.	

### SECTION 8: Exposure controls/personal protection

8.1. Control parameters

### No additional information available

8.2. Exposure controls	
Appropriate engineering controls	: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Hand protection	: Protective gloves. 29 CFR 1910.138: Hand Protection.
Eye protection	: Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection.
Other information	: Safety shoes. 29 CFR 1910.136: Foot Protection.

## SECTION 9: Physical and chemical properties

9.1.	Information on basic physic	al and chemical properties	
Physical	state	: Liquid	
Color		: No data available	
Odor		: Stench.	
Odor thr	eshold	: No data available	
рН		: No data available	
Melting p	point	: No data available	
Freezing	) point	: No data available	
Boiling p	point	: 69 - 70 °C (@ 0.2 mm Hg)	)

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Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 0.9882 g/ml (@ 20 °C)
Molecular mass	: 166.283 g/mol
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
9.2. Other information	

Refractive index

: 1.5505 (@ 20 °C)

SECT	ION 10: Stability and reactivity
10.1.	Reactivity
No add	itional information available
10.2.	Chemical stability
The pro	oduct is stable at normal handling and storage conditions.
10.3.	Possibility of hazardous reactions
No add	itional information available
10.4.	Conditions to avoid
Keep a	way from heat, sparks and flame.
10.5.	Incompatible materials
Air. Stro	ong oxidizing agents.
10.6.	Hazardous decomposition products
	normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of e Section 5.
SECT	ION 11: Toxicological information
11.1.	Information on toxicological effects

Acute toxicity	: Oral: Harmful if swallowed.
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

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SECT	ION 12: Ecological information
12.1.	Toxicity
No addi	tional information available
12.2.	Persistence and degradability
No addi	tional information available
12.3.	Bioaccumulative potential
No addi	tional information available
12.4.	Mobility in soil
No addi	tional information available
12.5.	Other adverse effects
No addi	tional information available

SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Waste treatment methods	: Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.	
Waste disposal recommendations	: Dispose of contents/container in accordance with licensed collector's sorting instructions.	
Additional information	: Recycle the material as far as possible.	

#### **Department of Transportation (DOT)**

**SECTION 14: Transport information** 

In accordance with DOT Not regulated for transport

#### TDG

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

	2-(tert-Butyl)thiophenol	CAS No 19728-41-7	100%
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This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 15.2. International regulations

CANADA No additional information available

### **EU-Regulations**

No additional information available

#### National regulations

No additional information available

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

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### **SECTION 16: Other information**

#### Full text of H-phrases:

	a of fr philases.		
	Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4	
	Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A	
	Skin Irrit. 2	Skin corrosion/irritation Category 2	
	STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
	H302	Harmful if swallowed	
	H315	Causes skin irritation	
	H319	Causes serious eye irritation	
	H335	May cause respiratory irritation	
NFPA health hazard NFPA fire hazard NFPA reactivity		<ul> <li>3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.</li> <li>1 - Must be preheated before ignition can occur.</li> <li>1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.</li> </ul>	
	II Rating	· O Mederate Userand. Temperature expires initiative metric and	
Health		: 2 Moderate Hazard - Temporary or minor injury may occur	
Flamma	ability	<ul> <li>1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)</li> </ul>	
Physica	<ul> <li>Sical</li> <li>Sight Hazard - Materials that are normally stable but can become unstable (self-temperatures and pressures. Materials may react non-violently with water hazardous polymerization in the absence of inhibitors.</li> </ul>		

SDS US (GHS HazCom 2012)

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones which exist. SynQuest shall not be held liable or any damage resulting from handling or from contact with the above product.