

Safety Data Sheet
according to 1907/2006/EC, Article 31

Revision: 17.08.2010

Printing date 17.08.2010

1 Identification of substance**Product details**

Trade name

2-Nitrothiophene

Stock number:

A17464, L11681

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
Benzstrasse 3
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com
www.alfa-chemcat.com

Informing department:

Product safety department.

Emergency information:

Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240**2 Hazards identification**

Hazard designation:



Xn Harmful

Information pertaining to particular dangers
for man and environment
GHS label elements

R 68 Possible risk of irreversible effects.

**Warning**

Prevention:

H341 - Suspected of causing genetic defects.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.

Response:

P308+P313 IF exposed or concerned: Get medical advice/attention.

Storage:

P405 Store locked up.

Disposal:

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

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)

2-Nitrothiophene (CAS# 609-40-5): 100%

Identification number(s):

EINECS Number:

210-190-9

4 First aid measures

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing

Seek medical treatment.

5 Fire fighting measuresSuitable extinguishing agents
Special hazards caused by the material, its
products of combustion or flue gases:CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Protective equipment:

Can be released in case of fire:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)
Sulphur oxides (SO_x)
Wear self-contained breathing apparatus.
Wear full protective suit.**6 Accidental release measures**

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

Measures for environmental protection:

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

Measures for cleaning/collecting:

Collect mechanically.

Additional information:

See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.**7 Handling and storage**

Handling

Information for safe handling:

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
No special precautions necessary if used correctly.Information about protection against
explosions and fires:

Keep ignition sources away - Do not smoke.

Storage
Requirements to be met by storerooms and
containers:
Information about storage in one common
storage facility:

No special requirements.

Further information about storage
conditions:Store in the dark.
Store away from oxidizing agents.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from the effects of light.**8 Exposure controls and 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.

Components with critical values that require
monitoring at the workplace:
Additional information:Not required.
No dataPersonal protective equipment
General protective and hygienic measuresThe usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Use breathing protection with high concentrations.

Breathing equipment:

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Protection of hands:	Check protective gloves prior to each use for their proper condition. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Safety glasses Protective work clothing.	(Contd. of page 1)
Material of gloves		
Eye protection:		
Body protection:		

9 Physical and chemical properties:**General Information**

Form:	Crystalline
Colour:	Yellow
Smell:	Not determined

Change in condition	
Melting point/Melting range:	43-45°C
Boiling point/Boiling range:	224-225°C
Sublimation temperature / start:	Not determined

Flash point:	94°C
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Ignition temperature:	Not determined
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Decomposition temperature:	Not determined
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Danger of explosion:	Product is not explosive.
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Critical values for explosion:	
Lower:	Not determined
Upper:	Not determined

Steam pressure:	Not determined
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Density at 20°C	1.364 g/cm ³
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Solubility in / Miscibility with Water:	Insoluble
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10 Stability and reactivity

Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
Materials to be avoided:	Light Oxidizing agents
Dangerous reactions:	No dangerous reactions known
Dangerous products of decomposition:	Carbon monoxide and carbon dioxide Nitrogen oxides (NO _x) Sulphur oxides (SO _x)

11 Toxicological information

Acute toxicity:	
Primary irritant effect: on the skin:	Irritant for skin and mucous membranes.
on the eye:	Irritant effect.
Sensitization:	No sensitizing effect known.
Other information (about experimental toxicology):	Mutagenic effects have been observed on tests with bacteria.
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

Additional ecological information:	
General notes:	Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:	
Recommendation	Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.
Uncleaned packagings:	
Recommendation:	Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)	
ADR/RID-GGVS/E Class:	None


Maritime transport IMDG/GGVSea:	
IMDG/GGVSea Class:	None
Marine pollutant:	No

Air transport ICAO-TI and IATA-DGR:	
ICAO/IATA Class:	None

Transport/Additional information:	Not dangerous according to the above specifications.
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15 Regulatory information

Designation according to EC guidelines:	Observe the normal safety regulations when handling chemicals
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Code letter and hazard designation of product:	 Xn Harmful
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Risk phrases:	68 Possible risk of irreversible effects.
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Safety phrases:	36/37 Wear suitable protective clothing and gloves.
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National regulations

Information about limitation of use: Employment restrictions concerning young persons must be observed.
For use only by technically qualified individuals.

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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 data specification sheet: Health, Safety and Environmental Department.

Contact: Zachariah Holt

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)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

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