

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 02.08.2010

Revision: 02.08.2010

1 Identification of substance

Product details

Trade name

o-Tolunitrile

Stock number:

B22231, L07364

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:



Xi Irritant

Information pertaining to particular dangers for man and environment

R 36/38 Irritating to eyes and skin.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS label elements

**Warning**

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Prevention:

Response:

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)

o-Tolunitrile (CAS# 529-19-1)

Identification number(s):

EINECS Number:

208-451-7

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.

After swallowing

Rinse opened eye for several minutes under running water. Then consult doctor.

Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Special hazards caused by the material, its products of combustion or flue gases:

Can be released in case of fire:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

Hydrogen cyanide (HCN)

Wear self-contained breathing apparatus.

Wear full protective suit.

Protective equipment:

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Ensure adequate ventilation

Measures for cleaning/collecting:

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

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.

Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Storage

Requirements to be met by storerooms and containers:

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.

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:

Not required.

Additional information:

No data

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food.

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Breathing equipment:
Protection of hands:
Material of gloves

Eye protection:**Body protection:**

Instantly remove any soiled and impregnated garments.
 Wash hands during breaks and at the end of the work.
 Avoid contact with the eyes and skin.
 Use breathing protection with high concentrations.
 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
 Face protection
 Protective work clothing.

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

Form: Liquid
Colour: Colourless
Smell: Almond-like

Change in condition
Melting point/Melting range: -14°C
Boiling point/Boiling range: 205-206°C
Sublimation temperature / start: Not determined

Flash point: 84°C**Ignition temperature:** >525°C**Decomposition temperature:** Not determined**Danger of explosion:** Product is not explosive.

Critical values for explosion:
Lower: 1.1 Vol %
Upper: 6.7 Vol %

Steam pressure at 20°C: 0.5 hPa**Density at 20°C** 0.987 g/cm³

Solubility in / Miscibility with
Water: Not miscible or difficult to mix

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.
Materials to be avoided: Oxidizing agents
Dangerous reactions: No dangerous reactions known
Dangerous products of decomposition: Carbon monoxide and carbon dioxide
 Nitrogen oxides (NOx)
 Hydrogen cyanide (prussic acid)

11 Toxicological information**Acute toxicity:****LD/LC50 values that are relevant for classification:**

Oral	LD50	3200 mg/kg (rat) (RTECS)
Irritation of skin	moderate	unknown mg (rabbit) (external SDS)

Primary irritant effect:**on the skin:** Irritant for skin and mucous membranes.**on the eye:** Irritant effect.**Sensitization:** No sensitizing effect known.**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:**

Ecotoxicological effects:
Remark: Harmful to aquatic organisms

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.
 Harmful to aquatic organisms

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:****Code letter and hazard designation of product:**

Xi Irritant

Risk phrases:

36/38 Irritating to eyes and skin.
 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

23 Do not breathe fumes.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 37 Wear suitable gloves.
 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

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)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

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