

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 16.07.2010

Revision: 16.07.2010

1 Identification of substance

Product details

Trade name

Methyl 5-nitro-2-furoate

Stock number:

A15226, L09115

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.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Response:

Storage:

Disposal:

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)

Methyl 5-nitro-2-furoate (CAS# 1874-23-3): 100%

4 First aid measures

After inhalation

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

After skin contact

Instantly 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 doctor.

After swallowing

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 (NO_x)
 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.

Additional information:

Dispose of contaminated material as waste according to item 13.
 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.
 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:

Check protective gloves prior to each use for their proper condition.

Protection of hands:

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.

Material of gloves

Impervious gloves

Not determined

Safety glasses

Penetration time of glove material

Eye protection:

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Body protection: Protective work clothing.

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

Form: Crystalline powder
 Colour: Pale yellow
 Smell: Not determined

Change in condition
 Melting point/Melting range: 78-81°C
 Boiling point/Boiling range: Not determined
 Sublimation temperature / start: Not determined

Flash point: Not applicable

Ignition temperature: Not determined

Decomposition temperature: Not determined

Danger of explosion: Product is not explosive.

Critical values for explosion:
 Lower: Not determined
 Upper: Not determined

Steam pressure: Not determined

Density: Not determined

Solubility in / Miscibility with Water: Insoluble

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)

11 Toxicological information

Acute toxicity: Primary irritant effect:

on the skin: May cause irritation
 on the eye: May cause irritation
 Sensitization: No sensitizing effect known.

Other information (about experimental toxicology): Mutagenic effects have been observed on tests with bacteria.

Ames Salmonella Typhimurium test: Positive.

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.

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of product:



Xn Harmful

Risk phrases: 68 Possible risk of irreversible effects.

Safety phrases: 36/37 Wear suitable protective clothing and gloves.

National regulations

Information about limitation of use:

For use only by technically qualified individuals.
 Employment restrictions concerning young persons must be observed.

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

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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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

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