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

Printing date 09.08.2010 Revision: 09.08.2010

1 Identification of substance

**Product details** 

Trade name 2,4-Difluoro-3-methoxyaniline

Stock number:

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG

Benzstrasse 3 D-76185 Karlsruhe / Germany

Product safety department. Giftnotruf Universität Mainz / Poison Information Center Mainz www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240 **Emergency information:** 

2 Hazards identification

Informing department:

Hazard designation:

Xn Harmful

Information pertaining to particular dangers

for man and environment

**GHS** label elements

Prevention:

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R 36/38 Irritating to eyes and skin.

A Danger

H311 - Toxic in contact with skin.

H311 - Toxic in comact with a Warning
H302 - Harmful if swallowed.
H332 - Harmful if inhaled.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H319 - Causes serious eye irritation.
P280 Wear protective gloves/clothing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 IF exposed or if you feel unwell:
P310 Immediately call a POISON CENTER or doctor/physician. Response:

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#)

2,4-Difluoro-3-methoxyaniline (CAS# 886499-08-7)

4 First aid measures

After skin contact

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

persist. Seek immediate medical advice.

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

After eye contact 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 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)
Possibly Hydrogen cyanide (HCN)
Hydrogen fluoride (HF)

Protective equipment: 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: 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). Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation.

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

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

Additional information:

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:

Information about storage in one common

storage facility: Further information about storage conditions:

Store away from oxidizing agents.

No special requirements.

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

Not required. No data

monitoring at the workplace: Additional information:

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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. Avoid contact with the eyes and skin.

Use breathing protection with high concentrations.

Breathing equipment: Protection of hands: Material of gloves 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.

Impervious gloves Not determined Penetration time of glove material Safety glasses Face protection Eye protection:

**Body protection:** Protective work clothing.

9 Physical and chemical properties:

**General Information** Liquid Pale yellow Characteristic Form: Colour: Smell:

Change in condition Melting point/Melting range: Boiling point/Boiling range: Not determined Not determined Sublimation temperature / start: Not determined Flash point: Not determined

Ignition temperature: Not determined **Decomposition temperature:** Not determined

Danger of explosion: Product is not explosive.

Critical values for explosion:

ower: Not determined Upper: Not determined Steam pressure: Not determined Density Not determined

Solubility in / Miscibility with Water:

Not miscible or difficult to mix

10 Stability and reactivity

Thermal decomposition / conditions to be

avoided: Materials to be avoided:

Dangerous reactions: Dangerous products of decomposition:

No decomposition if used and stored according to specifications. Oxidizing agents

No dangerous reactions known
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Hydrogen fluoride
Possibly Hydrogen cyanide (HCN)

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

Irritant for skin and mucous membranes. Irritant effect.

on the eye: Sensitization: Additional toxicological information:

No sensitizing effect known.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Danger by skin resorption.

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 Hand over to disposers of hazardous waste.

Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)

6.1 (T1) Toxic substances.

ADR/RID-GGVS/E Class: Kemler Number: UN-Number: Packaging group: Label

2810 III 6.1 2810 TOXIC LIQUID, ORGANIC, N.O.S. (2,4-Difluoro-3-methoxyaniline) Designation of goods: Limited quantities (LQ) Transport category

LQ7

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**Tunnel restriction code** Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 6.1 2810 UN Number: 6.1 III Label Packaging group: EMS Number: -A,S-A

Marine pollutant: Correct technical name: TOXIC LIQUID, ORGANIC, N.O.S. (2,4-Difluoro-3-methoxyaniline)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: UN/ID Number: 6.1 2810 6.1 III Label Packaging group: Correct technical name:

TOXIC LIQUID, ORGANIC, N.O.S. (2,4-Difluoro-3-methoxyaniline)

UN "Model Regulation": UN2810, TOXIC LIQUID, ORGANIC, N.O.S., 6.1, III

Ε

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:



Xn Harmful

20/21/22 Harmful by inhalation, in contact with skin and if swallowed. 36/38 Irritating to eyes and skin. Risk phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 36/37 Wear suitable protective clothing and gloves. Safety phrases:

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

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: Abbreviations and acronyms:

Health, Safety and Environmental Department.

Zachariah Holt

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 Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA: International Civil Association 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)