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

Printing date 14.07.2010 Revision: 14 07 2010

1 Identification of substance

Product details

Trade name 3-Fluoroanisole Stock number: A10931, L04380

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG

Benzstrasse 3 D-76185 Karlsruhe / Germany

Informing department: Emergency information:

Product safety department.

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

2 Hazards identification

Hazard designation:

Information pertaining to particular dangers for man and environment

GHS label elements

void

R 10 Flammable.

Warning

Prevention:

Response:

- Flammable liquid and vapour. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. H226

P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with

water/showe Disposal: P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#) Identification number(s):

3-Fluoroanisole (CAS# 456-49-5): 100%

EINECS Number: 207-267-4

4 First aid measures

After inhalation After skin contact Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice. Instantly wash with water and soap and rinse thoroughly.

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

5 Fire fighting measures

Protective equipment:

Suitable 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.

Can be released in case of fire: Carbon monoxide and carbon dioxide
Hydrogen fluoride (HF)
Wear self-contained breathing apparatus.
Wear full protective suit.

6 Accidental release measures

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Person-related safety precautions:

Measures for environmental protection:

Measures for cleaning/collecting:

Keep away from ignition sources

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). Keep away from ignition sources.

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

Additional information:

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. Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture.

Storage Requirements to be met by storerooms and

Information about storage in one common

storage facility: Further information about storage

conditions:

No special requirements.

Store away from oxidizing agents.

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: Additional information:

Not required. 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.
Check protective gloves prior to each use for their proper condition.

Breathing equipment: Protection of hands:

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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 Material of gloves

Safety glasses Face protection Eye protection:

Body protection: Protective work clothing.

9 Physical and chemical properties:

General Information Liquid Colourless Form: Colour: Smell: Not determined

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined 158-159°C Not determined Flash point: 44°C

Ignition temperature: Not determined Decomposition temperature: Not determined

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

Density at 20°C 1.104 g/cm3

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

Hydrogen fluoride

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

on the eye: Sensitization:

Irritant for skin and mucous membranes. Irritant effect.

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.

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)



3 (F1) Flammable liquids. ADR/RID-GGVS/E Class: Kemler Number: UN-Number: Packaging group: 1993 III

1993 FLAMMABLE LIQUID, N.O.S. (not viscous) (3-Fluoroanisole) LQ7

Label
Designation of goods:
Limited quantities (LQ)
Transport category
Tunnel restriction code Ď/E

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: **UN Number:**

3 1993 Label
Packaging group:
Marine pollutant:
Correct technical name: 3 ||| No

FLAMMABLE LIQUID, N.O.S. (3-Fluoroanisole)

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Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 3 1993 UN/ID Number: Label

III FLAMMABLE LIQUID, N.O.S. (3-Fluoroanisole) Packaging group: Correct technical name:

UN "Model Regulation":

UN1993, FLAMMABLE LIQUID, N.O.S., 3, III

15 Regulatory information

Designation according to EC guidelines:

Risk phrases: 10 Flammable.

Safety phrases:

Keep container tightly closed.
 Take precautionary measures against static discharges.
 This material and its container must be disposed of as hazardous waste.

National regulations

Information about limitation of use: 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:
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: Règliement 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: International

GB