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Printing date 12.08.2010 Revision: 12.08.2010

1 Identification of substance

Product details

6-Chloro-2-fluoro-3-methoxyaniline Trade name

Stock number:

Manufacturer/Supplier: Alfa Aesar GmbH & Co.KG

Benzstrasse 3

D-76185 Karlsruhe / Germany

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:

GHS label elements

Xn Harmful

Information pertaining to particular dangers

for man and environment

Danger of cumulative effects. Irritating to eyes and skin. R 33 R 36/38

H311 - Toxic in contact with skin.

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Warning

Danger

H373 - May cause damage to organs through prolonged or repeated exposure.

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Warning H302 - Harmful if swallowed. H332 - Harmful if inhaled.

Prevention: Response:

H332 - Harmful if inhaled.
H315 - Causes skin irritation.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
P280 Wear protective gloves/clothing.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
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.

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#) 6-Chloro-2-fluoro-3-methoxyaniline (CAS#?)

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 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 be released in case of fire:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Possibly Hydrogen cyanide (HCN)
Hydrogen fluoride (HF)
Hydrogen chloride (HCl)
Wear self-contained breathing apparatus.
Wear full protective suit

Protective equipment:

Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
Do not allow material to be released to the environment without proper governmental permits. Measures for environmental protection: Measures for cleaning/collecting:

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

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.

Requirements to be met by storerooms and

containers: 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.

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Store in cool, dry conditions in well sealed containers.

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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.
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.

Breathing equipment: Protection of hands: Material of gloves

40-43°C

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	
Form: Colour: Smell:	Powder Whitish Characteristic
Change in condition	

Melting point/Melting range: Boiling point/Boiling range: Not determined Sublimation temperature / start: Not determined Not applicable Flash point: 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 Not determined Density

Solubility in / Miscibility with Water:

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Materials to be avoided:

Dangerous reactions:
Dangerous products of decomposition:

No dangerous reactions known

No decomposition if used and stored according to specifications.

Oxidizing agents

Insoluble

Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Hydrogen fluoride

Hydrogen chloride (HCI)
Possibly Hydrogen cyanide (HCN)

11 Toxicological information

Acute toxicity: Primary irritant effect:

on the skin: on the eve:

Sensitizátion:

Irritant for skin and mucous membranes. Irritant effect.

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

12 Ecological information:

Additional ecological information: General notes:

Additional toxicological information:

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.

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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: 6.1 (T2) Toxic substances.

Kemler Number: 60 2811 UN-Number: ĪĬĬ Packaging group:

Label

Designation of goods: 2811 TOXIC SOLID, ORGANIC, N.O.S. (6-Chloro-2-fluoro-3-methoxyaniline)

Limited quantities (LQ) Transport category LQ9 2 E Tunnel restriction code

Maritime transport IMDG/GGVSea:

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

Marine pollutant: Correct technical name:

TOXIC SOLID, ORGANIC, N.O.S. (6-Chloro-2-fluoro-3-methoxyaniline)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: UN/ID Number: 2811 Label 6.1 III

Packaging group: Correct technical name: TOXIC SOLID, ORGANIC, N.O.S. (6-Chloro-2-fluoro-3-methoxyaniline)

UN "Model Regulation": UN2811, TOXIC SOLID, ORGANIC, N.O.S., 6.1, III

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.
 Danger of cumulative effects.
 Irritating to eyes and skin. Risk phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
28 After contact with skin, wash immediately with plenty of soap and water.
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: 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.

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 Rid Andritine Code for 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: T: 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)