



MATERIAL SAFETY DATA SHEET

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ALPHA-CHLORO-4-FLUOROACETANILIDE

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name:
ALPHA-CHLORO-4-FLUOROACETANILIDE

Stock number : A17669

Information Department:
Health, Safety and Environmental Department

Company Information:
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SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS

Chemical characterization: Description: (CAS#)

alpha-Chloro-4-fluoroacetanilide (CAS# 351-04-2): 100%

SECTION 3- HAZARDS IDENTIFICATION

Hazard description:
Xi Irritant

Information pertaining to particular dangers for man and environment:
R 36/37/38 Irritating to eyes, respiratory system and skin.

Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)
Health (acute effects) = 1
Flammability = 1
Reactivity = 1

SECTION 4- FIRST AID MEASURES

After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact:
Immediately 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 a doctor.

After swallowing:

Seek immediate medical advice.

SECTION 5- FIRE FIGHTING MEASURES

Suitable extinguishing agents :

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Nitrogen oxides (Nox)

Hydrogen fluoride (HF)

Hydrogen chloride (HCl)

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

SECTION 6- ACCIDENTAL RELEASE MEASURES

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Measures for environmental protection:

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

Measures for cleaning/collecting:

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 disposal information.

SECTION 7 - HANDLING and STORAGE

Handling

Information for safe handling:

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires:

Keep ignition sources away.

Storage

Requirements to be met by storerooms and receptacles:

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.

SECTION 8 - EXPOSURE CONTROLS, 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 limit 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 for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Protection of hands:

Impervious gloves

Material of gloves:

The selection of suitable gloves not only depends on the material, but also on quality.

Quality will vary from manufacturer to manufacturer.

Eye protection:

Safety glasses

Body protection:

Protective work clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form : Crystalline powder

Odor : Not determined

Value/Range Unit Method

Change in condition

| | | |
|--|---|---|
| Melting point/Melting range | : | Not determined |
| 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 does not present an explosion Hazard. |
| Explosion limits: | | |
| Lower | : | Not determined |
| Upper | : | Not determined |
| Vapor pressure | : | Not determined |
| Density | : | Not determined |
| Solubility in / Miscibility with Water | : | Not determined |

SECTION 10 - STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided:

Decomposition will not occur 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

Hydrogen fluoride

Hydrogen chloride (HCl)

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity:

Primary irritant effect:

on the skin:

Irritant to skin and mucous membranes.

on the eye:

Irritating effect.

Sensitization:

No sensitizing effects known.

Subacute to chronic toxicity:

Other than potential irritation (see above), no information on illness or injury to humans from acute or chronic exposure to this product is available.

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.

SECTION 12 - ECOLOGICAL INFORMATION

General notes:

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

SECTION 13 - DISPOSAL CONSIDERATIONS

Product:

Recommendation:

Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

SECTION 14 - TRANSPORT INFORMATION

DOT regulations:

| | | |
|---------------------------------------|---|------|
| Hazard class | : | None |
| Identification number | : | None |
| Packing group | : | None |
| Proper shipping name (technical name) | : | None |

Land transport ADR/RID (cross-border)

| | | |
|----------------------|---|------|
| ADR/RID class | : | None |
| Danger code (Kemler) | : | None |
| UN-Number | : | None |
| Packaging group | : | None |
| Description of goods | : | None |

Maritime transport IMDG:

| | | |
|----------------------|---|------|
| IMDG Class | : | None |
| UN Number | : | None |
| Label | : | None |
| Packaging group | : | None |
| Proper shipping name | : | None |

Air transport ICAO-TI and IATA-DGR:

| | | |
|----------------------|---|------|
| ICAO/IATA Class | : | None |
| UN/ID Number | : | None |
| Label | : | None |
| Packaging group | : | None |
| Proper shipping name | : | None |

Transport/Additional information:

Not dangerous according to the above specifications.

SECTION 15 - REGULATORY INFORMATION

Product related hazard informations:

Hazard symbols:

Xi Irritant

Risk phrases:

36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

37 Wear suitable gloves.

National regulations:

This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. Some or all of the components of this product are not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

Information about limitation of use:

For use only by technically qualified individuals.

SECTION 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 MSDS:

Health, Safety and Environmental Department.

Contact:

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