



**p-Chloro Aniline**  
**CAS No 106-47-8**

**MATERIAL SAFETY DATA SHEET**  
**SDS/MSDS**

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifiers**

Product name : **p-Chloro Aniline**

CAS-No. : 106-47-8

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Industrial & for professional use only.

**1.3 Details of the supplier of the safety data sheet**

Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
Ansari Road Daryaganj  
New Delhi-110002  
INDIA

Telephone : +91 11 49404040

Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Carcinogenicity (Category 1B), H350

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 3), H311

Acute toxicity, Oral (Category 3), H301

Skin sensitisation (Category 1), H317

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 Label elements**

**Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal word

Danger

Hazard statement(s)	
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H350	May cause cancer.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
P201	Obtain special instructions before use.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P311	Call a POISON CENTER /doctor.
Supplemental Hazard Statements	none

Restricted to professional users.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Formula	:	Cl.C6H4.NH2
Molecular weight	:	127.57 g/mol
CAS-No.	:	106-47-8
EC-No.	:	203-401-0
Index-No.	:	612-137-00-9

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
<b>4-Chloroaniline</b>			
CAS-No.	106-47-8	Acute Tox. 3; Skin Sens. 1;	<= 100 %
EC-No.	203-401-0	Carc. 1B; Aquatic Acute 1;	
Index-No.	612-137-00-9	Aquatic Chronic 1; H301, H331, H311, H317, H350, H400, H410	
		M-Factor - Aquatic Acute: 10	

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- 4.2 Most important symptoms and effects, both acute and delayed**  
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
- 4.3 Indication of any immediate medical attention and special treatment needed**  
No data available

## **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media**  
**Suitable extinguishing media**  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2 Special hazards arising from the substance or mixture**  
Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride gas
- 5.3 Advice for firefighters**  
Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4 Further information**  
No data available

## **SECTION 6: Accidental release measures**

- 6.1 Personal precautions, protective equipment and emergency procedures**  
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.  
For personal protection see section 8.
- 6.2 Environmental precautions**  
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- 6.3 Methods and materials for containment and cleaning up**  
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections**  
For disposal see section 13.

## **SECTION 7: Handling and storage**

- 7.1 Precautions for safe handling**  
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.  
Provide appropriate exhaust ventilation at places where dust is formed.  
For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities**  
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.  
Light sensitive. Store under inert gas. Air sensitive.  
Storage class (TRGS 510): Combustible solids, toxic
- 7.3 Specific end use(s)**  
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## **SECTION 8: Exposure controls/personal protection**

- 8.1 Control parameters**

## 8.2 Exposure controls

### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- |  |  |
|--|--|
| a) Appearance                              | Form: solid                            |
| b) Odour                                   | No data available                      |
| c) Odour Threshold                         | No data available                      |
| d) pH                                      | 6.9 at 1.00000 g/l at 20.0 °C          |
| e) Melting point/freezing point            | Melting point/range: 69 - 71 °C - lit. |
| f) Initial boiling point and boiling range | 232 °C - lit.                          |
| g) Flash point                             | 120.0 °C - closed cup                  |

h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	0.027 mmHg at 26.0 °C 0.3 mmHg at 38.0 °C 0.2 mmHg at 25.0 °C
l) Vapour density	No data available
m) Relative density	1.14 g/cm <sup>3</sup> at 100.00 °C
n) Water solubility	2 g/l
o) Partition coefficient: n-octanol/water	log Pow: 2.12 log Pow: 1.70
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

## 9.2 Other safety information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

acids, Acid chlorides, Acid anhydrides, Chloroformates, Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride gas

Other decomposition products - No data available

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - male - 256.0 mg/kg(4-Chloroaniline)

LC50 Inhalation - Rat - 4 h - 2,340 mg/m<sup>3</sup>(4-Chloroaniline)

Remarks: Behavioral:Somnolence (general depressed activity). Lungs, Thorax, or Respiration:Dyspnea. Cyanosis

LD50 Dermal - Rat - male - 455.0 mg/kg(4-Chloroaniline)

**Skin corrosion/irritation**

Skin - Rabbit(4-Chloroaniline)

Result: No skin irritation

**Serious eye damage/eye irritation**

Eyes - Rabbit(4-Chloroaniline)

Result: Mild eye irritation

**Respiratory or skin sensitisation**

**Germ cell mutagenicity**

No data available(4-Chloroaniline)

**Carcinogenicity**

This product is or contains a component that has been reported to be proba EPA classification.(4-Chloroaniline)

Possible human carcinogen(4-Chloroaniline)  
(4-Chloroaniline)

IARC: 2B - Group 2B: Possibly carcinogenic to humans (4-Chloroaniline)

**Reproductive toxicity**

No data available(4-Chloroaniline)

**Specific target organ toxicity - single exposure**

No data available(4-Chloroaniline)

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available(4-Chloroaniline)

**Additional Information**

RTECS: BX0700000

May cause cyanosis., Absorption into the body leads to the formation of methemoglobin which in delayed 2 to 4 hours or longer., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(4-Chloroaniline)

Cardiovascular system. - (4-Chloroaniline)

**SECTION 12: Ecological information**

**12.1 Toxicity**

Toxicity to fish	LC50 - Lepomis macrochirus (Bluegill) - 1.8 - 3.2 mg/l - 96.0 h(4-Chloroaniline)
	LC50 - Oncorhynchus mykiss (rainbow trout) - 9.7 - 16 mg/l - 96.0 h(4-Chloroaniline)
	LC50 - Pimephales promelas (fathead minnow) - 7 - 18 mg/l - 96.0 h(4-Chloroaniline)
	LC50 - Danio rerio (zebra fish) - 33 mg/l - 96.0 h(4-Chloroaniline)
	LC50 - Leuciscus idus (Golden orfe) - 23 mg/l - 48.0 h(4-Chloroaniline)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 0.04 - 0.06 mg/l - 48 h(4-Chloroaniline)
Toxicity to algae	EC50 - Desmodesmus subspicatus (green algae) - 2.20 - 6.30 mg/l - 72 h(4-



H331	Toxic if inhaled.
H350	May cause cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.



