



# p-Nitro Aniline CAS No 100-01-6

# 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-Nitro Aniline

CAS-No. : 100-01-6

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 New Delhi-10002

**INDIA** 

Telephone : +91 11 49404040

Email : 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

Acute toxicity, Oral (Category 3), H301 Acute toxicity, Inhalation (Category 3), H331 Acute toxicity, Dermal (Category 3), H311

Specific target organ toxicity - repeated exposure (Category 2), H373

Chronic aquatic toxicity (Category 3), H412

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

# Classification according to EU Directives 67/548/EEC or 1999/45/EC

T Toxic R23/24/25

R33 R52/53

For the full text of the R-phrases 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 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled

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

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P261 Avoid breathing dust.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/

physician.

P311 Call a POISON CENTER or doctor/ physician.

Supplemental Hazard none

Statements

#### 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 : C6H6N2O2

Molecular weight : 138,12 g/mol
CAS-No. : 100-01-6
EC-No. : 202-810-1
Index-No. : 612-012-00-9

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

Component Classification Concentration

p-Nitroaniline

CAS-No. 100-01-6 Acute Tox. 3; STOT RE 2; <= 100 %

EC-No. 202-810-1 Aquatic Chronic 3; H301 + Index-No. 612-012-00-9 H311 + H331, H373, H412

# Hazardous ingredients according to Directive 1999/45/EC

Component Classification Concentration

p-Nitroaniline

CAS-No. 100-01-6 T, R23/24/25 - R33 - R52/53 <= 100 %

EC-No. 202-810-1 Index-No. 612-012-00-9

For the full text of the H-Statements and R-Phrases 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

Flush eyes with water as a precaution.

#### 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 (NOx)

#### 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.

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.

Moisture sensitive.

Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

#### 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**

# Components with workplace 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 a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a 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

Form: crystalline Appearance

Colour: yellow

b) Odour Ammonia odorAmmonia odor

Odour Threshold No data available

рΗ 7.0 d)

Melting point/freezing e)

point

Melting point/range: 146 - 149 °C - lit.

Initial boiling point and f)

boiling range

260 °C at 133 hPa - lit.

Flash point 213,0 °C - closed cup h) Evaporation rate No data available

i) Flammability (solid, gas) No data available Upper/lower j)

flammability or explosive limits No data available

0,005 hPa at 25,0 °C Vapour pressure k) Vapour density No data available m) Relative density 1,44 g/cm3

n) Water solubility slightly soluble

o) Partition coefficient: n-

octanol/water

log Pow: 1,39log Pow: 5

p) Auto-ignition 180,0 °C

temperature

q) Decomposition

No data available

temperature r) Viscosity

s) Explosive properties

Oxidizing properties

No data available
No data available
No data available

# 9.2 Other safety information

Bulk density 630 kg/m3

# **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

Strong acids, Strong oxidizing agents, Strong reducing agents, Plastics, Rubber

# 10.6 Hazardous decomposition products

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 - 750,0 mg/kg

LD50 Dermal - Guinea pig - > 500,0 mg/kg

# Skin corrosion/irritation

No data available

# Serious eye damage/eye irritation

No data available

# Respiratory or skin sensitisation

No data available

# Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

# Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### **Aspiration hazard**

No data available

# **Additional Information**

RTECS: BY7000000

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., Exposure to and/or consumption of alcohol may increase toxic effects., Headache, Unconsciousness, Cough, chest pain, Difficulty in breathing, Drowsiness, Nausea, Cyanosis, Ataxia., Diarrhoea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., p-Nitroaniline is readily absorbed by inhalation, ingestion, or skin absorption. It is a strong methemoglobin former. Cyanosis is the first manifestation of toxicity.

Liver -

#### **SECTION 12: Ecological information**

# 12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 85,7 - 142 mg/l - 96,0 h

LC50 - Leuciscus idus (Golden orfe) - 35 mg/l - 48,0 h LC50 - Danio rerio (zebra fish) - 87,6 mg/l - 96,0 h

Toxicity to daphnia and

other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 17,00 mg/l - 48 h

Toxicity to algae EC50 - No information available. - 68,00 mg/l - 24 h

# 12.2 Persistence and degradability

No data available

## 12.3 Bioaccumulative potential

Bioaccumulation Danio rerio (zebra fish) - 96 h

- 0,028 mg/l

Bioconcentration factor (BCF): 4,4

# 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

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.

#### 12.6 Other adverse effects

Harmful to aquatic life with long lasting effects.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

# Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: 1661 IMDG: 1661 IATA: 1661

#### 14.2 UN proper shipping name

ADR/RID: NITROANILINES

IMDG: NITROANILINES (o-, m-, p-)

IATA: Nitroanilines

# 14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

# 14.6 Special precautions for user

No data available

#### **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

# 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

# Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Aquatic Chronic Chronic aquatic toxicity H301 Chronic if swallowed.

H301 + H311 + Toxic if swallowed, in contact with skin or if inhaled

H331

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

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

# Full text of R-phrases referred to under sections 2 and 3

T Toxic

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R33 Danger of cumulative effects.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

#### **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 for additional terms and conditions of sale.