

# P-TOLUIDINE FOR SYNTHESIS MSDS



CAS No: 106-49-0 MSDS

## MATERIAL SAFETY DATA SHEET (MSDS)

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

#### 1.1. Product identifier

Product form : Substance  
:  
EC index no : 612-160-00-4  
EC no : 203-403-1  
CAS No : 106-49-0  
Product code : B-2740A  
Chemical structure :



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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Bio-Chem Chemicals  
5455, Nicholson Road Science Market,  
Ambala Cantt. 133001 Haryana (India)  
+91-82952 41953  
[info@biofinechemical.com](mailto:info@biofinechemical.com) - [www.biofinechemical.com](http://www.biofinechemical.com)

#### 1.4. Emergency telephone number

Emergency number : +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (dermal), H311  
Category 3  
Acute toxicity (inhal.), H331  
Category 3  
Acute toxicity (oral), H301  
Category 3  
Carcinogenicity, Category 2  
H351

# p-TOLUIDINE FOR SYNTHESIS

## Safety Data Sheet

---

Serious eye damage/eye irritation, Category 2 H319  
Sensitisation — Skin, category 1 H317  
Hazardous to the aquatic environment — Acute Hazard, Category 1 H400

Full text of classification categories and H statements : see section 16

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

Carc.Cat.3; R40  
T; R23/24/25  
Xi; R36  
R43  
N; R50

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

GHS08

GHS09

Signal word (CLP) :

-

Hazard statements (CLP) :

H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H351 - Suspected of causing cancer  
H400 - Very toxic to aquatic life

Precautionary statements (CLP) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
P273 - Avoid release to the environment  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P311 - Call a POISON CENTER or doctor/physician

## 2.3. Other hazards

No additional information available

# p-TOLUIDINE FOR SYNTHESIS

## Safety Data Sheet

---

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name : p-TOLUIDINE FOR SYNTHESIS  
CAS No : 106-49-0  
EC no : 203-403-1  
EC index no : 612-160-00-4

Full text of R- and H-phrases: see section 16

#### 3.2. Mixture

Not applicable

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.  
First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.  
First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.  
First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause an allergic skin reaction. Toxic if inhaled.  
Symptoms/injuries after skin contact : Toxic in contact with skin.  
Symptoms/injuries after eye contact : Causes serious eye irritation.  
Symptoms/injuries after ingestion : Toxic if swallowed.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).  
Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.  
Emergency procedures : Stop release.

# p-TOLUIDINE FOR SYNTHESIS

## Safety Data Sheet

---

### 6.2. Environmental precautions

Very toxic to aquatic life.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Molecular mass : 107.16 g/mol

Colour : White crystalline.

Odour : aromatic odor.

Odour threshold : No data available

pH : 7.8

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 42 - 45

Freezing point : No data available

# p-TOLUIDINE FOR SYNTHESIS

## Safety Data Sheet

---

Boiling point	: 200 °C
Flash point	: 87 °C
Auto-ignition temperature	: 482 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 1 mm Hg at 20C
Relative vapour density at 20 °C	: 3.9
Relative density	: No data available
Density	: 0.973 g/cm <sup>3</sup>
Solubility	: Water: Insoluble in water
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions of use.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Dermal: Toxic in contact with skin. Inhalation: Toxic if inhaled. Oral: Toxic if swallowed.

# p-TOLUIDINE FOR SYNTHESIS

## Safety Data Sheet

---

Skin corrosion/irritation	: Not classified pH: 7.8
Serious eye damage/irritation	: Causes serious eye irritation. pH: 7.8
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Toxic if swallowed. Toxic in contact with skin.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to ...

Ecology - waste materials : Hazardous waste due to toxicity.

# p-TOLUIDINE FOR SYNTHESIS

## Safety Data Sheet

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR) : 3451  
UN-No. (IMDG) : 3451  
UN-No.(IATA) : 3451  
UN-No.(ADN) : 3451  
UN-No. (RID) : 3451

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : TOLUIDINES, SOLID  
Proper Shipping Name (IMDG) : TOLUIDINES, SOLID  
Proper Shipping Name (IATA) : TOLUIDINES, SOLID  
Proper Shipping Name (ADN) : TOLUIDINES, SOLID  
Proper Shipping Name (RID) : TOLUIDINES, SOLID  
Transport document description (ADR) : UN 3451 TOLUIDINES, SOLID, 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS  
Transport document description (IMDG) : UN 3451 TOLUIDINES, SOLID, 6.1, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS  
Transport document description (IATA) : UN 3451 TOLUIDINES, SOLID, 6.1, II, ENVIRONMENTALLY HAZARDOUS  
Transport document description (ADN) : UN 3451 TOLUIDINES, SOLID, 6.1, II, ENVIRONMENTALLY HAZARDOUS  
Transport document description (RID) : UN 3451 TOLUIDINES, SOLID, 6.1, II, ENVIRONMENTALLY HAZARDOUS

#### 14.3. Transport hazard class(es)

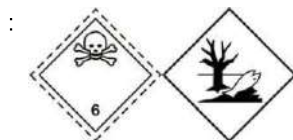
##### ADR

Transport hazard class(es) (ADR) : 6.1  
Danger labels (ADR) : 6.1



##### IMDG

Transport hazard class(es) (IMDG) : 6.1  
Danger labels (IMDG) : 6.1



##### IATA

Transport hazard class(es) (IATA) : 6.1  
Hazard labels (IATA) : 6.1



##### ADN

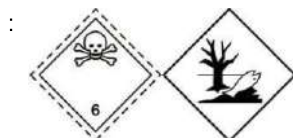
# p-TOLUIDINE FOR SYNTHESIS

## Safety Data Sheet

---

Transport hazard class(es) (ADN) : 6.1

Danger labels (ADN) : 6.1



### RID

Transport hazard class(es) (RID) : 6.1

Danger labels (RID) : 6.1



### 14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

### 14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : T2

Special provision (ADR) : 279

Limited quantities (ADR) : 500g

Excepted quantities (ADR) : E4

Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T3

Portable tank and bulk container special provisions (ADR) : TP33

Tank code (ADR) : SGAH, L4BH

Tank special provisions (ADR) : TU15, TE19

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Special provisions for carriage - Packages (ADR) : V11

Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28

Special provisions for carriage - Operation (ADR) : S9, S19

Hazard identification number (Kemler No.) : 60



# p-TOLUIDINE FOR SYNTHESIS

## Safety Data Sheet

---

Orange plates



Tunnel restriction code (ADR) : D/E

EAC code : 2X

### - Transport by sea

Special provision (IMDG) : 279  
Limited quantities (IMDG) : 500 g  
Excepted quantities (IMDG) : E4  
Packing instructions (IMDG) : P002  
IBC packing instructions (IMDG) : IBC08  
IBC special provisions (IMDG) : B2, B4  
Tank instructions (IMDG) : T3  
Tank special provisions (IMDG) : TP33  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-A  
Stowage category (IMDG) : A  
MFAG-No : 153

### - Air transport

PCA Excepted quantities (IATA) : E4  
PCA Limited quantities (IATA) : Y644  
PCA limited quantity max net quantity (IATA) : 1kg  
PCA packing instructions (IATA) : 669  
PCA max net quantity (IATA) : 25kg  
CAO packing instructions (IATA) : 676  
CAO max net quantity (IATA) : 100kg  
Special provision (IATA) : A113  
ERG code (IATA) : 6L

### - Inland waterway transport

Classification code (ADN) : T2  
Special provisions (ADN) : 279, 802  
Limited quantities (ADN) : 500 g  
Excepted quantities (ADN) : E4  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 2

### - Rail transport

Classification code (RID) : T2  
Special provision (RID) : 279  
Limited quantities (RID) : 500g  
Excepted quantities (RID) : E4  
Packing instructions (RID) : P002, IBC08  
Special packing provisions (RID) : B4  
Mixed packing provisions (RID) : MP10  
Portable tank and bulk container instructions (RID) : T3  
Portable tank and bulk container special provisions (RID) : TP33  
Tank codes for RID tanks (RID) : SGAH, L4BH  
Special provisions for RID tanks (RID) : TU15

# p-TOLUIDINE FOR SYNTHESIS

## Safety Data Sheet

---

Transport category (RID) : 2  
Special provisions for carriage – Packages (RID) : W11  
Special provisions for carriage – Loading and unloading (RID) : CW13, CW28, CW31  
Colis express (express parcels) (RID) : CE9  
Hazard identification number (RID) : 60

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

p-TOLUIDINE FOR SYNTHESIS is not on the REACH Candidate List

p-TOLUIDINE FOR SYNTHESIS is not on the REACH Annex XIV List

#### 15.1.2. National regulations

##### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (KBwS-Beschluss; WGK No 693)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Denmark

Class for fire hazard : Class III-1

Store unit : 50 liter

Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

# p-TOLUIDINE FOR SYNTHESIS

## Safety Data Sheet

---

Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
H301	Toxic if swallowed
H311	Toxic in contact with skin
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R36	Irritating to eyes
R40	Limited evidence of a carcinogenic effect
R43	May cause sensitisation by skin contact
R50	Very toxic to aquatic organisms
N	Dangerous for the environment
T	Toxic
Xi	Irritant

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*