

# Material Safety Data Sheet



**4-NITROANILINE**

**VERSION : 01**

**DATE OF ISSUE :02-12-2016**

**SUPERSEDES : Nil**

**Product Code : 16565**

**Page 1 of 9**

## **1. Identification of the substance/mixture and of the company/undertaking**

### **1.1. Product identifier**

**Trade name :** 4-NITROANILINE

**Product code :** 16595

**Identification of the product :** 4-NITROANILINE

**CAS No :**100-01-6

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

**Use :** Industrial. For professional use only.

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

**Company identification :** MOLYCHEM

**Office:** 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.

**Email :** [info@molychem.net](mailto:info@molychem.net)

**Works:** Plot No. B/9, Badlapur M.I.D.C.,OPP.Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503.

### **1.4. Emergency telephone number**

**Emergency number :** +91 22 4066 8111 (10:00am - 6:00 pm)

## **2. Hazards identification -DSD**

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

**Classification EC 67/548 or EC 1999/45**

**Classification :** T; R23/24/25

R33

R52-53

**Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)**

**Health hazards :** Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301

Acute toxicity, dermal - Category 3 - Danger (CLP : Acute Tox. 3) H311

Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331

**Environmental hazards :** Hazardous to the aquatic environment - Chronic hazard -  
Category 3 (CLP : Aquatic Chronic 3) H412

### **2.2. Label elements**

**Labelling EC 67/548 or EC 1999/45**

**Symbol(s) :** T : Toxic



**R Phrase(s) :** 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

**MOLYCHEM Office:** 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)

**Tel:** +91 22 4066 8111, 2205 7772 . **Fax:** + 91 22 2203 4442. **Email :** [info@molychem.net](mailto:info@molychem.net)

**Works:** Plot No. B/9, Badlapur M.I.D.C.,OPP.Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503

# Material Safety Data Sheet



**4-NITROANILINE**

**VERSION : 01**

**DATE OF ISSUE :02-12-2016**

**SUPERSEDES : Nil**

**Product Code : 16565**

**Page 2 of 9**

aquatic environment.

**S Phrase(s) :** S28 : After contact with skin, wash immediately with

S36/37 : Wear suitable protective clothing and gloves.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.

**Labelling Regulation EC 1272/2008 (CLP)**

**Hazard pictograms**



**Signal words :** Danger

**Hazard statements :** H301 : Toxic if swallowed.

H311 : Toxic in contact with skin.

H331 : Toxic if inhaled.

H412 : Harmful to aquatic life with long lasting effects.

**Precautionary statements**

• **Prevention :** P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

P273: Avoid release to the environment.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

• **Response :** P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.

P302+P352: IF ON SKIN : Wash with plenty of soap and water.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.

P363: Wash contaminated clothing before reuse.

P361: Remove immediately all contaminated clothing.

• **Storage :** P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.

• **Disposal considerations :** P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**2.3. Other hazards**

**MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)**

**Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email : [info@molychem.net](mailto:info@molychem.net)**

**Works: Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503**

# Material Safety Data Sheet



**4-NITROANILINE**

**VERSION : 01**

**DATE OF ISSUE :02-12-2016**

**SUPERSEDES : Nil**

**Product Code : 16565**

**Page 3 of 9**

**Other hazards :** The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

### **3. Composition/information on ingredients**

**Substance / Preparation :** 4-NITROANILINE

CAS No :100-01-6

Substance.

Contains no other components or impurities which will influence the classification of the product.

### **4. First aid measures**

#### **4.1. Description of first aid measures**

**Inhalation :** Assure fresh air breathing. Allow the victim to rest. Remove to fresh air and keep at rest in a position comfortable for breathing. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.

**Skin contact :** Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

**Eye contact :** Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

**Ingestion :** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label).

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

**Symptoms relating to use :** Repeated exposure to this material can result in absorption through skin causing significant health hazard. Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard.

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

**General information :** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

### **5. Fire-fighting measures**

#### **5.1. Extinguishing media**

**Suitable extinguishing media :** Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media :** Do not use a heavy water stream.

**Surrounding fires :** Use water spray or fog for cooling exposed containers.

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

**MOLYCHEM Office:** 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)

**Tel:** +91 22 4066 8111, 2205 7772 . **Fax:** + 91 22 2203 4442. **Email :** [info@molychem.net](mailto:info@molychem.net)

**Works:** Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503

# Material Safety Data Sheet



**4-NITROANILINE**

**VERSION : 01**

**DATE OF ISSUE :02-12-2016**

**SUPERSEDES : Nil**

**Product Code : 16565**

**Page 4 of 9**

**Hazardous combustion products :** Under fire conditions, hazardous fumes will be present.

## **5.3. Advice for fire-fighters**

**Protection against fire :** Do not enter fire area without proper protective equipment, including respiratory protection.

**Special procedures :** Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

## **6. Accidental release measures**

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

**For emergency responders :** Equip cleanup crew with proper protection. Ventilate area.

**For non-emergency personnel :** Evacuate unnecessary personnel.

### **6.2. Environmental precautions**

**Environmental precautions :** Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment.

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

**Clean up methods :** On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

### **6.4. Reference to other sections**

See section 8. Exposure controls/personal protection

## **7. Handling and storage**

### **7.1. Precautions for safe handling**

**Handling :** Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, vapours, spray.

**Technical protective measures :** Provide good ventilation in process area to prevent formation of vapour.

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

**Storage :** Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

**Storage - away from :** Strong bases. Strong acids. Sources of ignition. Direct sunlight.

### **7.3. Specific end use(s)**

**Specific end use(s) :** None.

## **8. Exposure controls/personal protection**

### **8.1. Exposure controls**

**Personal protection :** Avoid all unnecessary exposure.

**MOLYCHEM Office:** 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)

**Tel:** +91 22 4066 8111, 2205 7772 . **Fax:** + 91 22 2203 4442. **Email :** [info@molychem.net](mailto:info@molychem.net)

**Works:** Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503

# Material Safety Data Sheet



**4-NITROANILINE**

**VERSION : 01**

**DATE OF ISSUE :02-12-2016**

**SUPERSEDES : Nil**

**Product Code : 16565**

**Page 5 of 9**

• **Respiratory protection** : In case of insufficient ventilation, wear suitable respiratory equipment.

• **Hand protection** : Wear protective gloves.

• **Eye protection** : Chemical goggles or safety glasses.

• **Others** : When using, do not eat, drink or smoke.

## **8.2. Control parameters**

**Occupational Exposure Limits** : No data available.

## **9. Physical and chemical properties**

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

**Physical state at 20 °C** : Solid.

**Odour threshold** : No data available.

**pH value** : Not applicable.

**Melting point [°C]** : 146 - 149 °C

**Decomposition point [°C]** : N/A

**Critical temperature [°C]** : N/A

**Auto-ignition temperature [°C]** : 180 °C

**Flammability (solid, gas)** : N/A

**Flash point [°C]** : 213°C

**Boiling point [°C]** : 260 °C

**Initial boiling point [°C]** : N/A

**Final boiling point [°C]** : N/A

**Evaporation rate** : N/A

**Vapour pressure [20°C]** : N/A

**Vapour pressure mm/Hg** : N/A

**Vapour density** : 4,77

**Density [g/cm3]** : 1,44

**Relative density, gas (air=1)** : N/A

**Relative density, liquid (water=1)** : N/A

**Solubility in water [% weight]** : Slightly soluble

**Solubility in water** : N/A

**Log Pow octanol / water at 20°C** : No data available.

**Solubility** : 7

**Viscosity at 40°C [mm2/s]** : N/A

### **9.2. Other information**

**Explosive properties** : N/A

**Explosion limits - upper [%]** : N/A

**Explosion limits - lower [%]** : N/A

**Oxidising properties** : No data available.

**MOLYCHEM Office:** 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)

**Tel:** +91 22 4066 8111, 2205 7772 . **Fax:** + 91 22 2203 4442. **Email :** [info@molychem.net](mailto:info@molychem.net)

**Works:** Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503

# Material Safety Data Sheet



4-NITROANILINE

VERSION : 01

DATE OF ISSUE : 02-12-2016

SUPERSEDES : Nil

Product Code : 16565

Page 6 of 9

## **10. Stability and reactivity**

### **10.1. Reactivity**

**Reactivity** : Not established.

### **10.2. Chemical stability**

**Chemical stability** : Stable under recommended storage conditions.

### **10.3. Possibility of hazardous reactions**

**Hazardous reactions** : Not established.

### **10.4. Conditions to avoid**

**Conditions to avoid** : Direct sunlight. Extremely high or low temperatures.

### **10.5. Incompatible materials**

**Materials to avoid** : Strong acids. Strong bases.

### **10.6. Hazardous decomposition products**

**Hazardous decomposition products** : Fumes. Carbon monoxide. Carbon dioxide.

## **11. Toxicological information**

### **11.1. Information on toxicological effects**

#### **Acute toxicity**

- **Inhalation** : Toxic if inhaled.
- **Dermal** : Toxic in contact with skin.
- **Ingestion** : Toxic if swallowed.

**Corrosion** : Based on available data, the classification criteria are not met.

**Irritation** : Based on available data, the classification criteria are not met.

**Sensitization** : Based on available data, the classification criteria are not met.

**Mutagenicity** : Based on available data, the classification criteria are not met.

**Carcinogenicity** : Based on available data, the classification criteria are not met.

**Toxic for reproduction** : Based on available data, the classification criteria are not met.

**STOT-single exposure** : Based on available data, the classification criteria are not met.

**STOT-repeated exposure** : Based on available data, the classification criteria are not met.

**Aspiration hazard** : Based on available data, the classification criteria are not met.

## **12. Ecological information**

### **12.1. Toxicity**

**Toxicity information** : Harmful to aquatic life with long lasting effects.

### **12.2. Persistence - degradability**

**Persistence - degradability** : May cause long-term adverse effects in the environment.

### **12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Not established.

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email : [info@molychem.net](mailto:info@molychem.net)

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503

# Material Safety Data Sheet



**4-NITROANILINE**

**VERSION : 01**

**DATE OF ISSUE :02-12-2016**

**SUPERSEDES : Nil**

**Product Code : 16565**

**Page 7 of 9**

## **12.4. Mobility in soil**

**Mobility in soil** : Not established.

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

**Results of PBT and vPvB assessment** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

## **12.6. Other adverse effects**

**Environmental precautions** : Avoid release to the environment.

## **13. Disposal considerations**

### **13.1. Waste treatment methods**

**General** : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions** : Hazardous waste due to toxicity.

## **14. Transport information**

### **14.1. Land transport (ADR-RID)**

**Proper shipping name** : NITROANILINES (o-, m-, p-)

**UN N°** : 1661

**H.I. nr** : 60

**ADR - Class** : 6.1

**Labelling - Transport** : 6.1 : Toxic substances.

**ADR - Classification code** : T2

**ADR - Group** : II

**ADR - Packing instructions** : P002

**ADR - Limited Quantity** : 500 G

**ADR - Tunnel code** : D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.

### **14.2. Sea transport (IMDG) [English only]**

**Proper shipping name** : NITROANILINES (o-, m-, p-)

**UN N°** : 1661

**IMO-IMDG - Class or division** : 6.1 : Toxic substances.

**IMO-IMDG - Packing group** : II

**IMO-IMDG - Packing instructions** : P002

**IMO-IMDG - Limited quantities** : 500 g

**IMO-IMDG - Marine pollution** : No

**EMS-Nr** : F-A S-A

**MOLYCHEM Office:** 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)

**Tel:** +91 22 4066 8111, 2205 7772 . **Fax:** + 91 22 2203 4442. **Email :** [info@molychem.net](mailto:info@molychem.net)

**Works:** Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503

# Material Safety Data Sheet



**4-NITROANILINE**

**VERSION : 01**

**DATE OF ISSUE :02-12-2016**

**SUPERSEDES : Nil**

**Product Code : 16565**

**Page 8 of 9**

## **14.3. Air transport (ICAO-IATA) [English only]**

**Proper shipping name : NITROANILINES (o-, m-, p-)**

**UN N° : 1661**

**IATA - Class or division : 6.1 : Toxic substances.**

**IATA - Packing group : II**

**IATA - Passenger and Cargo Aircraft : ALLOWED**

**- Passenger and Cargo - Packing : 669**

**instruction**

**- Passenger and Cargo - Maximum : 25 kg**

**Quantity/Packing**

**IATA - Cargo only : ALLOWED**

**- Cargo only - Packing instruction : 676**

**- Cargo only - Maximum Quantity/ : 100 kg**

**Packing**

**IATA - Limited Quantities : 1 kg**

**ERG-Nr : 6L**

## **15. Regulatory information**

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

**Safety, health and environmental : Ensure all national/local regulations are observed. regulations/legislation specific for the substance or mixture**

**REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.**

**REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.**

**15.2. Chemical Safety Assessment**

**Chemical Safety Assessment : It has not been carried out.**

## **16. Other information**

**Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.**

**vPvB: very persistent and very bioaccumulative**

**Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006**

**Further information : None.**

**In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008 DISCLAIMER OF LIABILITY The information in this SDS was**

**MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)**

**Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email : [info@molychem.net](mailto:info@molychem.net)**

**Works: Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503**

# Material Safety Data Sheet



**4-NITROANILINE**

**VERSION : 01**

**DATE OF ISSUE :02-12-2016**

**SUPERSEDES : Nil**

**Product Code : 16565**

**Page 9 of 9**

obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

## End of document

**Prepared by: MOLYCHEM (INDIA)**

**For questions contact: MOLYCHEM**

**Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)**

**Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.**

**Email : [info@molychem.net](mailto:info@molychem.net)**

**Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503**

(The statements contained herein are offered for informational purposes only and are based upon technical data that MOLYCHEM believes to be accurate. It is intended for use only by persons having the necessary technical skills and at their own discretion and risk. Since conditions and manner of use are outside our control, we make NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE.)

**MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)**

**Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email : [info@molychem.net](mailto:info@molychem.net)**

**Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503**