

# **Material Safety Data Sheet**

**N-Methylaniline** 

# Section1. Chemical Product and Company Identification

Product Name: N-Methylaniline, Monomethylaniline Company Identification: Company Name: Changzhou Baolong Chemical Industrial Co., Ltd. Address: No 1, Weihua Road, Xinbei District, Changzhou City Jiangsu Province, China. TEL: +86-519-85720726 FAX: +86-519-85720728 Contact person: Michelle Lu E-mail: sales@czbaolong.com Website: www.czbaolong.com

## Section2. Composition, Information On Ingredients

| CAS#     | Chemical Name       | Percent | EINECS/ELINCS |
|----------|---------------------|---------|---------------|
| 100-61-8 | N-Methylaniline     | 99+     | 202-870-9     |
| 62-53-3  | Aniline             | 0.2-    | 200-539-3     |
| 121-69-7 | N,N-Dimethylaniline | 0.7-    | 204-493-5     |

# Molecular Formula: C<sub>7</sub>H<sub>9</sub>N

Molecular Weight: 107.15

Hazard Symbols:



# Section3. Hazard Identification

## **Emergency Overview**

Appearance: Clear yellow liquid

Flash point: 78 deg C

Warning! Combustible liquid and vapor. May cause central nervous system effects. May cause eye and skin irritation. May cause liver and kidney damage. Harmful if swallowed, inhaled, or absorbed through the skin. May cause blood abnormalities.

## **Target Organs:**

Blood, kidneys, central nervous system, liver, lungs.

## **Potential Health Effects**

Eye: May cause eye irritation

Skin: May cause skin irritation. Harmful if absorbed through the skin.

**Ingestion:** Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Methemoglobinemia is characterized by dizziness, drowsiness, headache, breath shortness, cyanosis with bluish skin, rapid heart rate and chocolate-brown colored blood. Effects may be delayed.

Inhalation: Harmful if inhaled. Effects may be delayed. May cause respiratory tract irritation.



May cause methemoglobinemia, cyanosis, convulsions, tachycardia, dyspnea (labored breathing), and death.

**Chronic:** May cause liver and kidney damage. May cause methemoglobinemia, which is characterized by chocolate-brown colored blood, headache, weakness, dizziness, breath shortness, cyanosis ( bluish skin due to deficient oxygenation of blood), rapid heart rate, unconsciousness and possible death. May cause anemia and other blood cell abnormalities. Prolonged or repeated exposure may cause nausea, dizziness, and headache. Effects may be delayed.

## **Section4. First Aid Measures**

## Eyes:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

## Skin:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

## **Ingestion:**

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

## Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

## Notes to physician:

For methemoglobinemia, administer oxygen alone or with Methylene blue depending on the methemoglobinemia concentration in the blood.

## Section 5. Fire Fighting Measures

## **General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Combustible Liquid. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

## **Extinguishing Media:**

Water may be ineffective. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature: 500 deg C (932 deg F)

Flash point: 78 deg C (172.4 deg F)

Explosion Limits: N/A

NFPA Rating: (estimated) Health: 2; Flammability: 2; Instability: 0



## Section6. Accidental Release Measures

#### General Information:

Use proper personal protective equipment as indicated in Section8.

#### Spills/ Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches with lead to waterways. Clean up spills immediately, observing precautions in the protective equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

## Section7. Handling and Storage

## Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation.

#### Storage:

Keep away from heat, sparks, and flames. Keep away from sources of ignition. Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Isolate from oxidizing materials and acids.

## Section8. Exposure Controls/ Personal Protection

## **Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

## **Personal Protective Equipments**

Eyes: Wear chemical goggles. Skin: Wear appropriate protective gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to prevent skin exposure. Respirators: Follow the OSHA respirator regulations found in 29CRF 1910.134 or European Standard EN149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## Section9. Physical and Chemical Properties

Physical State: Liquid Color: Clear yellow Odor: Ammonia-like-weak odor pH: N/A Vapor Pressure: 0.3 mm Hg@ 20 deg C Vapor Density: 3.7 (Air=1)



Evaporation Rate: N/A Viscosity: N/A Boling Point: 196 deg C @ 760mm Hg Freezing/ Melting Point: -57 deg C Decomposition Temperature: N/A Solubility in water: Slightly soluble Specific Gravity/Density: .9890g/cm3 @ 20/C Molecular Formula: C7H9N Molecular Weight: 107.15

## Section 10. Stability and Reactivity

## **Chemical Stability:**

Stable under normal temperatures and pressures. Substance undergoes color change upon exposure to air. Turns reddish-brown on exposure to light.

#### **Conditions to Avoid:**

Incompatible materials, ignition sources, exposure to air, excess heat.

## Incompatibilities with Other Materials:

Strong oxidizing agents, acids, acid chlorides, acid anhydrides.

## **Hazardous Decomposition Products:**

Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

## **Section 11. Toxicological Information**

## RTECS#: CAS# 100-61-8: BY4550000 LD50/LC50: N/A Carcinogenicity: N-Methylaniline-ACGIH: A3-Animal Carcinogen (listed as\*\*undefined\*\*). California: carcinogen; initial date 1/1/90 (listed as\*\*undefined\*\*) NIOSH: potential occupational carcinogen (listed as \*\*undefined\*\*) OSHA: Possible select carcinogen (listed as\*\*undefined\*\*) IARC: Group 3 carcinogen (listed as\*\*undefined\*\*). Epidemiology: No data available.

## **Reproductive Effects:**

Based on the fact that aniline can cross the placenta and induce fetal methemoglobinemia, a similar property can be expected in the case of N-Methylaniline.

#### Neurotoxicity:

No data available.

#### Mutagenicity:

No data available.

#### **Other studies:**

No data available.



# Section12. Ecological Information

Not Available.

## Section13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

US EPA guidelines for the classification determination are listed in 40 CRF Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCPA P-series: None listed.

RCRA U-Series: None listed.

## **Section14. Transport Information**

US DOT Shipping Name: N-Methylaniline, Monmethylaniline Hazard Class: 6.1 UN Number: UN2294 Packing Group: III Canadian TDG: No information available.

## **Section15. Regulatory Information**

Not available.

## Section16. Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.