# Material Safety Data Sheet o-TOLIDINE AR VERSION: 02 DATE OF ISSUE: 26-08-2019 SUPERSEDES: 01 Product Code: 26670 Page 1 of 9

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

1.1. Product identifier

**Trade name**: o-TOLIDINE AR

**Product code**: 26670

**Identification of the product**: 4,4'-bi-o-toluidine

CAS No:119-93-7

Chemical formula: C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>

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

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: Carc. Cat. 2; R45

C; R34 Xi: R37

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

**Health hazards**: Carcinogenicity - Category 1B - Danger (CLP: Carc. 1B) H350 Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation -

Category 3 - Warning (CLP: STOT SE 3) H335

Skin corrosion - Category 1B - Danger (CLP: Skin Corr. 1B) H314

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

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



**R Phrase(s)**: R45: May cause cancer.

R34: Causes burns.

R37: Irritating to respiratory system.

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**S Phrase(s)**: S53: Avoid exposure - obtain special instructions before use.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.

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

Labelling Regulation EC 1272/2008 (CLP)

#### **Hazard pictograms**





Signal words : Danger

**Hazard statements**: H314: Causes severe skin burns and eye damage.

H350: May cause cancer.

H335 : May cause respiratory irritation.

#### **Precautionary statements**

• General: P201: Obtain special instructions before use.

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

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

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

• **Response**: P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P308+P313: If exposed or concerned: get medical advice.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

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

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

- **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.

**Special labelling**: Restricted to professional users. (Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008)

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#### 2.3. Other hazards

**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: 4,4'-bi-o-toluidine

CAS No :119-93-7

Substance.

**Substance name 4,4'-bi-o-toluidine**:

CAS No.

100 %

119-93-7

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**: Call a POISON CENTER or doctor if you feel unwell. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.

**Skin contact**: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Immediately call a POISON CENTER or doctor.

**Eye contact**: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Ingestion**: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

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

**Symptoms relating to use**: May cause cancer.

Causes severe skin burns and eye damage. May cause respiratory irritation.

**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

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**Hazardous combustion products**: Under fire conditions, hazardous fumes will be present. Thermal decomposition generates: Corrosive vapours.

#### **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.

#### 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**: Use only outdoors or in a well-ventilated area. Wash contaminated clothing before reuse. Wash thoroughly after handling. Obtain special instructions before use. Do not breathe dust, fume, gas, mist, vapours, spray.

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

**Special precautions**: Avoid breathing dust, fume, gas, mist, vapours, spray.

#### 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 regulation**: Comply with applicable regulations.

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

7.3. Specific end use(s)

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

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#### 8. Exposure controls/personal protection

#### 8.1. Exposure controls

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

- **Respiratory protection**: Wear approved mask.
- Hand protection : Wear protective gloves.
- Skin protection : Wear suitable protective clothing.
- Eye protection : Chemical goggles or face shield.
- 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 [ $^{\circ}$ C] : 128 - 131  $^{\circ}$ C Decomposition point [ $^{\circ}$ C] : N/A Critical temperature [ $^{\circ}$ C] : N/A

Auto-ignition temperature [°C]: 4800C

Flammability (solid, gas): N/A

Flash point [°C]: 100 °C Boiling point [°C]: 200 °C Initial boiling point [°C]: N/A Final boiling point [°C]: N/A

**Evaporation rate**: N/A

**Vapour pressure [20°C]** : 0.2 mbar @ 200C

Vapour pressure mm/Hg: N/A

Vapour density: 3,7 Density [g/cm3]: 1,004

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

Solubility in water [% weight] : Slightly soluble in

**Solubility in water**: N/A

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

**Solubility**: N/A

Viscosity at  $40^{\circ}$ C [mm2/s] : N/A

**9.2. Other information Explosive properties** : N/A

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Explosion limits - upper [%]: 7,50% Explosion limits - lower [%]: 1,50% Oxidising properties: No data available.

#### 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.

Thermal decomposition generates: Corrosive vapours.

#### 11. Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity** 

- Inhalation: Based on available data, the classification criteria are not met.
- **Dermal** : Based on available data, the classification criteria are not met.
- **Ingestion**: Based on available data, the classification criteria are not met.

**Corrosion**: Causes severe skin burns and eye damage.

**Irritation**: May cause respiratory irritation.

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

**Carcinogenicity**: May cause cancer.

**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**: Not established.

12.2. Persistence - degradability

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Tel: +91 22 4066 8111, 2205 7772 . Fax: +91 22 2203 4442. Email: info@molychem.net
Works: Plot No. B/9, Badlapur M.I.D.C.,OPP.Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503

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**Persistence - degradability**: Biodegradable.

12.3. Bioaccumulative potential

**Bioaccumulative potential**: Not established.

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.

#### 14. Transport information

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

**Proper shipping name**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. UN N°: 3077 H.I. nr: 90 ADR - Class: 9

**Labelling - Transport**: 9: Miscellaneous dangerous substances and articles.

**ADR - Classification code** : M7

M7

ADR - Group : III

**ADR - Packing instructions**: P002 R001 LP002

**ADR - Limited Quantity**: 5 KG

**ADR - Tunnel code** : E : Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG) [English only]

**Proper shipping name**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. **UN N**°: 3077

**IMO-IMDG - Class or division**: 9: Miscellaneous dangerous substances and articles.

**IMO-IMDG - Packing group** : III

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**IMO- IMDG - Packing instructions**: P002 LP02

**IMO-IMDG - Limited quantities** : 5 kg **IMO-IMDG - Marine pollution** : No

EMS-Nr: F-A S-F

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

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. **UN N**°: 3077

**IATA - Class or division**: 9: Miscellaneous dangerous substances and articles.

**IATA - Packing group** : III

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing: 956

instruction

- Passenger and Cargo - Maximum: 400 kg

**Quantity/Packing** 

IATA - Cargo only : ALLOWED

- Cargo only - Packing instruction : 956

- Cargo only - Maximum Quantity/ :  $400 \ kg$ 

**Packing** 

IATA - Limited Quantites: 30 kg G

**ERG-Nr**: 9L

#### 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**: With the exception of those listed below:

The components of this product are not subject to restrictions.

Annex XVII

**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

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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.

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#### **End of document**

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