Material Safety Data Sheet 3,3'5,5'-TETRA METHYL BENZIDINE AR VERSION: 02 DATE OF ISSUE: 26-08-2019 SUPERSEDES: 01 Product Code: 26497 Page 1 of 8

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

1.1. Product identifier

Trade name: 3,3'5,5'-TETRAMETHYLBENZIDINE AR

Product code: 26497

Identification of the product: 3,3 5.5 - TETRAMETHYL BENZIDINE AR

CAS No: 54827-17-7

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: Xi: R36/37/38

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

Health hazards: Specific Target Organ Toxicity - Single exposure - Respiratory tract

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

Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315

Eye irritation - Category 2A - Warning (CLP: Eye Irrit. 2) H319

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s) : Xi : Irritant



R Phrase(s): R36/37/38: Irritating to eyes, respiratory system and skin.

S Phrase(s): S26: In case of contact with eyes, rinse immediately with plenty of water

and seek medical advice.

S36: Wear suitable protective clothing.

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms

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Signal words: Warning

Hazard statements: H319: Causes serious eye irritation.

H315: Causes skin irritation.

H335: May cause respiratory irritation.

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.

P264: Wash thoroughly after handling.

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

P332+P313: If skin irritation occurs: 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.

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.

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 : 3,3 5.5 - TETRAMETHYL BENZIDINE AR

CAS No: 54827-17-7

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

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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.

Skin contact: Get medical advice. If skin irritation occurs: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Specific treatment (see on this label).

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.

Ingestion: Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.

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

Symptoms relating to use: Causes serious eye irritation.

Causes skin irritation. 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.

 $\label{lem:unsuitable extinguishing media: Do not use a heavy water stream. \\$

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

5.2. Special hazards arising from the substance or mixture

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.

6.3. Methods and material for containment and cleaning up

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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. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.

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 - 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.

- **Respiratory protection**: Wear approved mask.
- Hand protection : Wear protective gloves.
- Skin protection: Wear suitable protective clothing.
- Eve 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]: 168 - 171 °C Decomposition point [°C]: N/A Critical temperature [°C]: N/A Auto-ignition temperature [°C]: N/A

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Flammability (solid, gas): N/A

Flash point $[^{\circ}C]$: N/A

Boiling point [°C] : 168 - 169 °C **Initial boiling point** [°C] : 168 °C **Final boiling point** [°C] : 169 °C

Evaporation rate: N/A

Vapour pressure [20°C] : N/A Vapour pressure mm/Hg : N/A

Vapour density : N/A Density [g/cm3] : N/A

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

Solubility in water [% weight] : Insoluble in water

Solubility in water: N/A

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

Solubility: N/A

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.

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

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

Irritation: Causes serious eye irritation. Causes skin 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: 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: Not established.

12.2. Persistence - degradability

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.

14. Transport information

14.1. Land transport (ADR-RID)

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General information: Not regulated.

14.2. Sea transport (IMDG) [English only]

General information: Not regulated.

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

General information: Not regulated.

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.

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End of document

Prepared by: MOLYCHEM (INDIA)

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