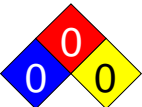



## 1 Identification

- **Trade name:** Tulsion ADS-600 ALD
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture**  
As an adsorbent, water treatment
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
M/s. Thermax Limited, Chemical Division,  
97-E, General Block, MIDC Industrial Area,  
Bhosari, Pune 411 026 [ India ]
- **Information department:**  
Tel: 91-20-66128100/66128200  
Off. No.: +91 -20-66128100/200  
Fax No. 020-27120206
- **Emergency telephone number:** +91 20-66128100/200  
24 hour emergency assistance: 00 91-20-66128100/200

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
The product is not classified according to the Globally Harmonized System (GHS).
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:**  
The product does not have to be labeled due to the calculation procedure of international guidelines.
- **Classification system:**  
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**  
Observe the general safety regulations when handling chemicals.  
The product is not subject to identification regulations according to directives on hazardous materials.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**  
 Health = 0  
Fire = 0  
Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**  
 HEALTH 0 Health = 0  
FIRE 0 Fire = 0  
REACTIVITY 0 Reactivity = 0
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**Trade name:** *Tulsion ADS-600 ALD*

### 3 Composition/information on ingredients

- **Chemical characterization:** *Mixtures*
- **Description:** *Mixture of the substances listed below with nonhazardous additions.*

- **Dangerous components:**

9052-95-3	Crosslinked Polystyrene	40-50%
7732-18-5	water, distilled, conductivity or of similar purity	50-60%

### 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** *Supply fresh air; if breathing is difficult give oxygen.*
- **After skin contact:** *Generally the product does not irritate the skin. Wash skin thoroughly with plenty of water.*
- **After eye contact:** *Rinse opened eye for several minutes under running water. Get medical aid.*
- **After swallowing:** *Wash out mouth with water provided person is conscious. If symptoms persist consult doctor.*
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed**  
*No further relevant information available.*

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
*CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*
- **Special hazards arising from the substance or mixture** *Emit toxic fumes under fire conditions.*
- **Advice for firefighters**
- **Protective equipment:** *Wear self contained breathing apparatus for fire-fighting if necessary.*

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** *Not required.*
- **Environmental precautions:** *Do not allow to enter in sewer/surface/ground water.*
- **Methods and material for containment and cleaning up:**  
*Sweep or scoop up spilled material into container for disposal. Close container tightly. Clean by water. Ensure adequate ventilation.*
- **Reference to other sections**  
*See Section 7 for information on safe handling.*  
*See Section 8 for information on personal protection equipment.*  
*See Section 13 for disposal information.*

### 7 Handling and storage

- **Precautions for safe handling** *Handle in ventilated area. Avoid pro-longed exposure.*
- **Information about protection against explosions and fires:** *No special measures required.*

**Trade name:** *Tulsion ADS-600 ALD*

**Conditions for safe storage, including any incompatibilities**

- **Storage:**
- **Requirements to be met by storerooms and receptacles:** *Store in a cool, dry, well ventilated area*
- **Information about storage in one common storage facility:** *Store away from oxidizing agents.*
- **Further information about storage conditions:** *Avoid repeated freeze-thaw cycles.*
- **Specific end use(s)** *As an adsorbent, water treatment*

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** *No further data; see item 7.*
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
*The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*
- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
*The usual precautionary measures for handling chemicals should be followed.*
- **Breathing equipment:** *Not required.*
- **Protection of hands:**



Protective gloves

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*
- **Material of gloves**  
*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*
  - **Penetration time of glove material**  
*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*
  - **Eye protection:** *Goggles recommended during refilling.*

**9 Physical and chemical properties**

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

- |                           |  |
|---------------------------|--|
| <b>Form:</b>              | <i>Moist solid</i>                       |
| <b>Color:</b>             | <i>White translucent spherical beads</i> |
| · <b>Odor:</b>            | <i>Odorless</i>                          |
| · <b>Odour threshold:</b> | <i>Not determined.</i>                   |

- |                    |                        |
|--------------------|------------------------|
| · <b>pH-value:</b> | <i>Not determined.</i> |
|--------------------|------------------------|

· **Change in condition**

- |                                     |                      |
|-------------------------------------|----------------------|
| <b>Melting point/Melting range:</b> | <i>Undetermined.</i> |
| <b>Boiling point/Boiling range:</b> | <i>Undetermined.</i> |

*Trade name: Tulsion ADS-600 ALD*

· <b>Flash point:</b>	Not applicable.
· <b>Auto igniting:</b>	427 Deg. C
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Vapor pressure at 20 °C (68 °F):</b>	23 hPa (17 mm Hg)
· <b>Density:</b> Vapour density	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Insoluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Solvent content:</b> Organic solvents: Volatile matter % (water):	0,0 % 50-60
· <b>Other information Specific gravity [H2O = 1]</b>	1.02 to 1.05

#### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability:** Stable under recommended storage conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Avoid temperature above 220 Deg. C
- **Incompatible materials:** Avoid contact with strong oxidizing agents such as nitric acid.
- **Hazardous decomposition products:** May include and not limited to carbon monoxide, carbon dioxide, aromatic compounds and hydrocarbons etc.

#### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
*The product is not subject to classification according to internally approved calculation methods for preparations.*  
*When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.*

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

**Trade name:** *Tulsion ADS-600 ALD*

· **OSHA-Ca (Occupational Safety & Health Administration)**

*None of the ingredients is listed.*

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **Persistence and degradability** *No appreciable biodegradation is expected. Surface photo degradation due to sunlight exposure may occur.*
- **Bioaccumulative potential** *No further relevant information available.*
- **Mobility in soil** *It will remain in soil and in aquatic environment it will sink in water and remain in sediment.*
- **Additional ecological information:**
- **General notes:** *Not known to be hazardous to water.*
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **Other adverse effects** *No further relevant information available.*

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:**  
*Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*

**14 Transport information**

· <b>UN-Number</b>	
· <b>DOT, ADR, IMDG, IATA</b>	<i>Not applicable</i>
· <b>UN proper shipping name</b>	
· <b>DOT, ADR, IMDG, IATA</b>	<i>Not applicable</i>
· <b>Transport hazard class(es)</b>	
· <b>DOT, ADR, IMDG, IATA</b>	
· <b>Class</b>	<i>Not applicable</i>
· <b>Packing group</b>	
· <b>DOT, ADR, IMDG, IATA</b>	<i>Not applicable</i>
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	<i>No</i>
· <b>Special precautions for user</b>	<i>Not applicable.</i>
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	<i>Not applicable.</i>
· <b>UN "Model Regulation":</b>	<i>-</i>

**Trade name:** *Tulsion ADS-600 ALD*

**15 Regulatory information**

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

· **Sara**

· **Section 355 (extremely hazardous substances):**

*None of the ingredients is listed.*

· **Section 313 (Specific toxic chemical listings):**

*None of the ingredients is listed.*

· **TSCA (Toxic Substances Control Act):**

*All ingredients are listed.*

· **Proposition 65**

· **Chemicals known to cause cancer:**

*None of the ingredients is listed.*

· **Chemicals known to cause reproductive toxicity for females:**

*None of the ingredients is listed.*

· **Chemicals known to cause reproductive toxicity for males:**

*None of the ingredients is listed.*

· **Chemicals known to cause developmental toxicity:**

*None of the ingredients is listed.*

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

*None of the ingredients is listed.*

· **TLV (Threshold Limit Value established by ACGIH)**

*TLV (ACGIH):1000 ppm.*

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

*None of the ingredients is listed.*

· **Product related hazard informations:**

*Observe the general safety regulations when handling chemicals.*

*The product is not subject to identification regulations according to directives on hazardous materials.*

· **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

**16 Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International*

*Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*