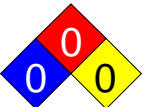



1 Identification

- **Trade name:** Tulsion ADS-400
- **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-400

3 Composition/information on ingredients

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

- **Dangerous components:**

N/A	Crosslinked Polyacrylates	30-40%
7732-18-5	water, distilled, conductivity or of similar purity	60-70%

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:**
CO₂, 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-400*

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:**

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

· **pH-value:** *Not determined.*

· **Change in condition**

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

Trade name: Tulsion ADS-400

· Flash point:	<i>Not applicable.</i>
· Auto igniting:	<i>427 Deg. C</i>
· Danger of explosion:	<i>Product does not present an explosion hazard.</i>
· Vapor pressure at 20 °C (68 °F):	<i>23 hPa (17 mm Hg)</i>
· Density: <i>Vapour density</i>	<i>Not determined.</i>
· Solubility in / Miscibility with Water:	<i>Insoluble.</i>
· Partition coefficient (n-octanol/water):	<i>Not determined.</i>
· Solvent content: <i>Organic solvents:</i> <i>Volatile matter % (water):</i>	<i>0.0 %</i> <i>60-70</i>
· Other information Specific gravity [H2O = 1]	<i>1.02 to 1.05</i>

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-400*

· **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

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

Trade name: *Tulsion ADS-400*

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)