

Safety Data Sheet
OSHA - DIRECTIVE NUMBER: CPL 02-02-079 Hazard
Communication Standard (HCS 2012)

Printing date 08/25/2022

Reviewed on 08/25/2022

1 Identification· **Product identifier**· **Trade name: Tulsion T-42 H**· **Application of the substance / the mixture**

Industrial water treatment, Condensate Polishing Unit, Demineralization, Ultrapure water production

· **Details of the supplier of the safety data sheet**· **Manufacturer/Supplier:**

M/s. Thermax Limited, Chemical Division,
93-94, General Block, MIDC Industrial Area,
MIDC Bhosari, Pune 411 026 India

· **Information department:**

Tel: 00 91 20 67156900/ 91 20 67156901

Off. No.: +91 20 67156900/6901

Fax No. 020-27120206

· **Emergency telephone number:**

+91 20 67156900/6901

24 hour emergency assistance: +91 20 67156900/6901

2 Hazard(s) identification· **Classification of the substance or mixture**

GHS05 Corrosion

Eye Damage 1 H318 Causes serious eye damage.

· **Label elements**· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**

GHS05

· **Signal word** *Danger*· **Hazard-determining components of labeling:**

Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, sulfonated
(Tulsion T-42 H)

· **Hazard statements**

H318 Causes serious eye damage.

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- **Precautionary statements**

Wash hands [and...] thoroughly after handling. Do not touch eyes.

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection

IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

Get emergency medical help.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = *3

Fire = 0

Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** The substances of preparation are not PBT.

- **vPvB:** The substances of preparation are not vPvB.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

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

- **Dangerous components:**

CAS: 69011-20-7	Sulfonated copolymer of Styrene and divinylbenzene in the Hydrogen form	44-50%
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- **Additional information:** 7732-18-5: Water: 50-56%

4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

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

- **After skin contact:**

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

- **After eye contact:**

Flush eyes thoroughly with water for at least 15 minutes occasionally lifting upper and lower eyelids. Get medical aid from preferably an ophthalmologist.

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- **After swallowing:**
If swallowed, wash out mouth with water provided person is conscious. Call a physician.
- **Information for doctor:** Treat symptomatically.
- **Most important symptoms and effects, both acute and delayed**
Eyes Causes serious eye irritation.
- **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
- **For safety reasons unsuitable extinguishing agents:** None Known
- **Special hazards arising from the substance or mixture**
No further relevant information available.
- **Advice for firefighters**
Wear self contained breathing apparatus for fire fighting if necessary.
- **Protective equipment:**
If safe to do so, remove containers from path of fire.
Use standard fire fighting procedures.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Keep away from drains, surface and groundwater and soil.
- **Methods and material for containment and cleaning up:**
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
- **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.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

CAS: 69011-20-7	Sulfonated copolymer of Styrene and divinylbenzene in the Hydrogen form	120 mg/m ³
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- **PAC-2:**

CAS: 69011-20-7	Sulfonated copolymer of Styrene and divinylbenzene in the Hydrogen form	1,300 mg/m ³
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· PAC-3:

CAS: 69011-20-7	Sulfonated copolymer of Styrene and divinylbenzene in the Hydrogen form	7,900 mg/m ³
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7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Avoid contact with eyes and skin.
- **Information about protection against explosions and fires:**
Normal measures for preventive fire protection.
- **Conditions for safe storage, including any incompatibilities**
Avoid formation of dust and aerosols.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool, dry, well-ventilated area away from incompatible substances.
- **Information about storage in one common storage facility:**
Store away from oxidizing agents.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** Environmental applications: Water Treatment Deionization

8 Exposure controls/personal protection

- **Additional information about design of technical systems:**
Provide general and/ or local exhaust to control airborne levels.
- **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:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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Trade name: Tulsion T-42 H**Protection of hands:**

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**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:**Tightly sealed goggles**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Body protection:

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

9 Physical and chemical properties

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

Appearance:	Solid
Form:	Spherical beads
Color:	Brown
Odor:	odourless

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

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· Flash point:	Not applicable.
· Auto igniting:	427 °C (800.6 °F)
· Danger of explosion:	Product does not present an explosion hazard.
· Density:	Not determined.
· Solubility in / Miscibility with Water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Solvent content:	
Water:	50-56 %
VOC content:	0.00 %
Solids content:	44-50 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable at ambient temperature and under normal conditions of use.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Avoid contact with strong oxidizing agents.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**

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

None of the ingredients is listed.

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<ul style="list-style-type: none"> · NTP (National Toxicology Program)
<ul style="list-style-type: none"> None of the ingredients is listed.
<ul style="list-style-type: none"> · OSHA-Ca (Occupational Safety & Health Administration)
<ul style="list-style-type: none"> None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** Quantitative data on the ecological effect of this product are not available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- **Results of PBT and vPvB assessment**

- **PBT:** The substances of preparation are not PBT.

- **vPvB:** The substances of preparation are not vPvB.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Dispose off waste material according to local, state and federal regulations.

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.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

<ul style="list-style-type: none"> · UN-Number 	Not Regulated
<ul style="list-style-type: none"> · DOT, ADR, IMDG, IATA 	

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<ul style="list-style-type: none"> · UN proper shipping name · DOT, ADR, IMDG, IATA 	Not Regulated
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class 	Not Regulated
<ul style="list-style-type: none"> · Packing group · DOT, ADR, IMDG, IATA 	Not Regulated
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: 	No
<ul style="list-style-type: none"> · Special precautions for user 	Not applicable.
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · UN "Model Regulation": 	Not Regulated

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **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 components have the value ACTIVE.

- **Hazardous Air Pollutants**

None of the ingredients is 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.

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- **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)**

TLV (ACGIH): 1000 ppm.

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

None of the ingredients is listed.

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05

- **Signal word** *Danger*

- **Hazard-determining components of labeling:**

Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, sulfonated
(Tulsion T-42 H)

- **Hazard statements**

H318 Causes serious eye damage.

- **Precautionary statements**

Wash hands [and] thoroughly after handling. Do not touch eyes.

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

- **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.

- **Department issuing SDS:** Product safety department.

- **Contact:**

Tel: 00 91 20 67156900/ 91 20 67156901

Off. No.: +91 20 67156900/6901

Fax No. 020-27120206

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· **Abbreviations and acronyms:**

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer
(Regulations Concerning the International Transport of Dangerous Goods by Rail)*

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international 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

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)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Eye Damage 1: Serious eye damage/eye irritation – Category 1

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