SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : LEWATIT TP 272
Product code : 56849886

Manufacturer or supplier’s details
Supplier : LANXESS Pty Ltd
2d Factory Street Granville, NSW 2142, Australia
Telephone : +61288687211
E-mail address of person responsible for the SDS : infosds@lanxess.com
Emergency telephone number : IXOM Emergency Response Service (ERS)
Phone 1800 033 111 • 24 hours • Toll-free • Australia wide

Recommended use of the chemical and restrictions on use
Recommended use : Ion exchange, resins and catalysts

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Serious eye damage/eye irritation : Category 2A
Aspiration hazard : Category 1
Short-term (acute) aquatic hazard : Category 2
Long-term (chronic) aquatic hazard : Category 2

GHS label elements
Hazard pictograms :

Signal word : Danger
Hazard statements : H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.
Precautionary statements : Prevention:
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.

Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331 Do NOT induce vomiting.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P391 Collect spillage.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : styrene-divinylbenzene copolymer, Contains:

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bis(2,4,4-trimethylpentyl)phosphinic acid</td>
<td>83411-71-6</td>
<td>&gt;= 30 &lt;- 60</td>
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</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

If inhaled : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
In case of skin contact: Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before re-use. Thoroughly clean shoes before reuse.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed: Call a physician immediately. If swallowed, call a poison control centre or doctor immediately. Take victim immediately to hospital. Rinse mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If conscious, make the victim drink the following: Give small amounts of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed - can enter lungs and cause damage. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If unconscious, place in recovery position and get medical attention immediately. Never give anything by mouth to an unconscious person. Keep respiratory tract clear. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, call a physician. Immediately give large quantities of water to drink.

Most important symptoms and effects, both acute and delayed: See Section 11 for more detailed information on health effects and symptoms. May be fatal if swallowed and enters airways. Causes serious eye irritation.

Notes to physician: See Section 11 for more detailed information on health effects and symptoms.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: In case of fire, use water spray (fog), foam, dry chemical or CO₂.

Unsuitable extinguishing media: None known.

Specific hazards during fire-fighting: Do not allow run-off from fire fighting to enter drains or water.
fighting courses.

Hazardous combustion products:
- Carbon dioxide (CO2)
- Carbon monoxide
- Oxides of phosphorus

Specific extinguishing methods:
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters:
- Wear self-contained breathing apparatus for firefighting if necessary.

Hazchem Code: 2Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Use personal protective equipment.
- Avoid dust formation.
- Avoid breathing dust.
- Ensure adequate ventilation.

Environmental precautions:
- Prevent product from entering drains.
- Prevent further leakage or spillage if safe to do so.
- If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:
- Move containers from spill area.
- Use a suitable vacuum cleaner.
- High efficiency particulate air filter (HEPA filter)
- Keep in suitable, closed containers for disposal.
- Dispose of wastes in an approved waste disposal facility.
- Do not dry sweep.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion:
- Avoid dust formation.
- Provide appropriate exhaust ventilation at places where dust is formed.

Advice on safe handling:
- Avoid formation of respirable particles.
- Do not breathe vapours/dust.
- Avoid contact with skin and eyes.
- For personal protection see section 8.
- Smoking, eating and drinking should be prohibited in the application area.
- Dispose of rinse water in accordance with local and national regulations.

Hygiene measures:
- When using do not eat or drink.
- When using do not smoke.
- Wash hands before breaks and at the end of workday.

Conditions for safe storage:
- Take action to prevent static discharges.
Keep away from direct sunlight or strong incandescent light. Do not allow to dry.

Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

**Recommended storage temperature**: -20 - 40 °C

**Further information on storage stability**: No decomposition if stored and applied as directed.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

**Personal protective equipment**

**Respiratory protection**: Dust-protection mask if there is a risk of dust formation.

**Filter type**: P1 filter

**Hand protection**

- **Material**: Fluorinated rubber - FKM
  - **Wearing time**: < 60 min

- **Material**: Polyvinyl chloride - PVC
  - **Wearing time**: < 60 min

- **Material**: Polychloroprene - CR
  - **Wearing time**: < 60 min

**Remarks**: After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

**Eye protection**: Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

**Skin and body protection**: Wear protective clothing.
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
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<tr>
<th>Property</th>
<th>Value</th>
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<tr>
<td>Explosive properties</td>
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</table>
Oxidizing properties : No data available
Molecular weight : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.
Chemical stability : No decomposition if stored and applied as directed.
Possibility of hazardous reactions : No decomposition if stored and applied as directed.
Conditions to avoid : Take measures to prevent the build up of electrostatic charge.
Incompatible materials : Strong oxidizing agents
Hazardous decomposition products : No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Components:

bis(2,4,4-trimethylpentyl)phosphinic acid:
Acute oral toxicity : LD50 (Rat): > 3,500 mg/kg
Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Skin corrosion/irritation
Not classified based on available information.

Product:
Remarks: May cause skin irritation in susceptible persons.
Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Components:

bis(2,4,4-trimethylpentyl)phosphinic acid:
Species: Rabbit
Exposure time: 24 h
Remarks: Mild skin irritation

Serious eye damage/eye irritation
Causes serious eye irritation.
Product:
Remarks: May cause irreversible eye damage.

Components:

bis(2,4,4-trimethylpentyl)phosphinic acid:
Species: Rabbit
Result: Irritating to eyes.

Respiratory or skin sensitisation
Skin sensitisation
Not classified based on available information.
Respiratory sensitisation
Not classified based on available information.

Components:

bis(2,4,4-trimethylpentyl)phosphinic acid:
Remarks: No known sensitising effect.

Chronic toxicity
Germ cell mutagenicity
Not classified based on available information.

Components:

bis(2,4,4-trimethylpentyl)phosphinic acid:
Genotoxicity in vitro:
Test system: Bacteria
Method: OECD Test Guideline 471
Result: negative

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
May be fatal if swallowed and enters airways.

Product:
May be fatal if swallowed and enters airways.
Further information

Product:
Remarks: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

bis(2,4,4-trimethylpentyl)phosphinic acid:
Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 22 mg/l
Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 2.9 mg/l
Exposure time: 48 h

Persistence and degradability

Components:

bis(2,4,4-trimethylpentyl)phosphinic acid:
Biodegradability: Result: Not readily biodegradable.
Biodegradation: 5.9 %
Exposure time: 28 d

Bioaccumulative potential

Components:

bis(2,4,4-trimethylpentyl)phosphinic acid:
Partition coefficient: n-octanol/water: log Pow: 5.9

Mobility in soil
No data available

Other adverse effects

Product:
Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging:
- Empty remaining contents.
- Dispose of as unused product.
- Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION**

**National Regulations**

**ADG**
- UN number: UN 3077
- Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
  (BIS(2,4,4-TRIMETHYLPENTYL)PHOSPINIC ACID)
- Class: 9
- Packing group: III
- Labels: 9

**Hazchem Code:** 2Z
**Environmentally hazardous:** yes

**International Regulations**

**IATA-DGR**
- UN/ID No.: UN 3077
- Proper shipping name: Environmentally hazardous substance, solid, n.o.s.
  (BIS(2,4,4-TRIMETHYLPENTYL)PHOSPINIC ACID)
- Class: 9
- Packing group: III
- Labels: 9

- Packing instruction (cargo aircraft): 956: 400.00 KG
- Packing instruction (passenger aircraft): 956: 400.00 KG
- Environmentally hazardous: yes
IMDG-Code
UN number : UN 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BIS(2,4,4-TRIMETHYLPENTYL)PHOSPINIC ACID)
Class : 9
Packing group : III
Labels :

Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Hazard statements : Environmentally hazardous substance.
Irritating to skin and eyes.
Keep separated from foodstuffs.

SECTION 15. REGULATORY INFORMATION

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

Standard for the Uniform Scheduling of Medicines and Poisons : No poison schedule number allocated
International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors : Not applicable
Prohibition/Licensing Requirements : There is no applicable prohibition or notification/licensing requirements, including for carcinogens under Commonwealth, State or Territory legislation.
Australia. Customs (Prohibited Imports) Regulations 1956 (CWC Schedule 1) : Neither banned nor restricted
Australia. Customs (Prohibited Imports) Regulations 1956 (CWC Schedule 2) : Neither banned nor restricted
Australia. Customs (Prohibited Imports) Regulations 1956 (CWC Schedule 3) : Neither banned nor restricted
Importation of ozone-depleting substances and synthetic greenhouse gases: Not applicable

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals

Revision Date: 15.03.2019

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