SAFETY DATA SHEET

Section 1. Identification

Product identifier : LEWATIT MDS TP 208
Material Number : 56814470
Chemical family : Cation Exchange Resin
Identified uses : Ion Exchange Resin
Supplier/Manufacturer : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112
USA

For information: US/Canada (800) LANXESS
International +1 412 809 1000

In case of emergency : Chemtrec (800) 424-9300
International (703) 527-3887
Lanxess Emergency (800) 410-3063

Section 2. Hazard identification

HAZCOM Standard Status : While this material is not considered hazardous by the Workplace Hazardous Materials Information System (WHMIS) 2015 requirements as defined in the Hazardous Product Act (HPA) and the Hazardous Products Regulations (HPR), the SDS contains valuable information critical to the safe handling and proper use of the product. The SDS should be retained and available for employees and other users of this product.

Physical state : Solid.
Color : Beige. opaque
Classification of the substance or mixture : Not classified.
Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements
Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Supplemental label elements : Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
CAS number : 114060-54-7

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.
Section 4. First-aid measures

Description of first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Potential acute health effects

Eye contact: No known significant effects or critical hazards.

Inhalation: No known significant effects or critical hazards.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

Potential chronic health effects

No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: No specific data.

Inhalation: No specific data.

Skin contact: No specific data.

Ingestion: No specific data.

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Protection of first-aiders: No special measures required.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire. In case of fire, use water spray (fog), foam or dry chemical.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: No specific fire or explosion hazard.

Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides
## Section 5. Fire-fighting measures

**Special protective actions for fire-fighters**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**: No action shall be taken involving any personal risk or without suitable training. Evacuate unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Hazard of slipping on spilled product.

**Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up**: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Prevent entry into sewers, water courses, basements or confined areas.

## Section 7. Handling and storage

**Precautions for safe handling**

**Protective measures**: Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

**Conditions for safe storage**: Store between the following temperatures: -20 to 40°C (-4 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Empty containers or liners may retain some product residues. It is recommended to store ion exchange resins at temperatures above the freezing point of water. If the resin should become frozen, the resin should not be mechanically handled and should be left to thaw out gradually at ambient temperature. It must be completely thawed before handling or use. No attempt should be made to accelerar the thawing process.

## Section 8. Exposure controls/personal protection

**Occupational exposure limits**: No exposure limit value known.

**Appropriate engineering controls**: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Personal protection**

**Hygiene measures**: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Respiratory protection**: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Section 8. Exposure controls/personal protection

Skin protection: Wear suitable protective clothing and gloves. Suitable protective footwear.

Eye/face protection: If contact with product is possible, wear safety glasses with side shields.

Medical Surveillance: Not available.

Section 9. Physical and chemical properties

Physical state: Solid. [beads]
Color: Beige. opaque
Odor: Odorless.
Odor threshold: Not available.
pH: Not available.
Boiling point: Not available.
Melting point: >200°C (>392°F)
Flash point: Not available.
Evaporation rate: Not available.
Explosion limits: Not available.
Vapor pressure: Not available.
Density: 1.16 g/cm³
Specific gravity (Relative density): 1.17
Bulk density: 700 to 780 kg/m³
Solubility in water: Insoluble in the following materials: cold water
Partition coefficient: n-octanol/water: Not available.
Vapor density: Not available.
Viscosity: Not available.
Ignition temperature: >300°C
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability: The product is stable.
Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid: No specific data.
Incompatible materials: Strong oxidants, e.g. nitric acid, can cause violent reactions if they come into contact with ion exchange resins.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on the likely routes of exposure: Dermal contact. Eye contact.

Potential acute health effects

Eye contact: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
Skin contact: No known significant effects or critical hazards.
Section 11. Toxicological information

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: No specific data.
Inhalation: No specific data.
Skin contact: No specific data.
Ingestion: No specific data.

Potential chronic health effects

Short term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Long term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.

General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
<th>Test</th>
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</thead>
<tbody>
<tr>
<td>LEWATIT MDS TP 208</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
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</table>

Irritation/Corrosion

Conclusion/Summary

Skin: Non-irritating. *Test results on an analogous product.
Eyes: Non-irritating. *Test results on an analogous product.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Mobility in soil

Soil/water partition coefficient ($K_{OC}$): Not available.

Other adverse effects: No known significant effects or critical hazards.
Section 13. Disposal considerations

Disposal methods:
The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Waste disposal should be in accordance with existing federal state, provincial and or local environmental controls laws.

Section 14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</th>
<th>PG*</th>
<th>Label</th>
<th>Additional information</th>
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</thead>
<tbody>
<tr>
<td>TDG Classification</td>
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<tr>
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<td>Remarks if packagings larger than 3 m³: dangerous good of division 4.2</td>
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<tr>
<td>IMDG Class</td>
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</tbody>
</table>

PG*: Packing group

Section 15. Regulatory information

CEPA Status:
All components of this product are on the Canadian DSL list.

U.S. Toxic Substances Control Act:
Listed on the TSCA Inventory.

Hazardous Material Information System:

<table>
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<tr>
<th>Health</th>
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<tbody>
<tr>
<td>Flammability</td>
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</tr>
<tr>
<td>Physical hazards</td>
<td>1</td>
</tr>
</tbody>
</table>

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme *=Chronic

National Fire Protection Association (U.S.A.):

<table>
<thead>
<tr>
<th>Health</th>
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<tbody>
<tr>
<td>Flammability</td>
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<tr>
<td>Instability/Reactivity</td>
<td>1</td>
</tr>
<tr>
<td>Special</td>
<td></td>
</tr>
</tbody>
</table>

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

LANXESS' method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS as a customer service.
Section 15. Regulatory information

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Section 16. Other information

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