



## LayneRT Safety Data Sheet

### SECTION 1: IDENTIFICATION

#### 1.1 Product identifier

Trade name: LayneRT  
Registration number: -  
Synonym(s): -  
Preparation/Revision date: 28 Feb. 2018

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Water treatment; Hybrid Adsorption Resin  
Uses advised against: None known

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer / Supplier

Company name: Layne  
Address: 1800 Hughes Landing Boulevard - Suite 800  
Woodlands, Texas 77380, USA  
Customer service: 1-281-475-2600

1.4 Emergency telephone number 1-800-262-8200 CHEMTREC

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification according to Regulation 29 CFR 1910.1200.  
Classification: Not Classified

#### 2.2 Label elements

GHS-US Labelling  
Hazard pictogram: None  
Signal word: None  
Hazard statement: None  
Precautionary statements:  
- Prevention: None

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### SECTION 2: HAZARDS IDENTIFICATION (CONT'D)

- Response: None  
- Storage: None  
- Disposal: None  
Supplemental label information: None

**2.3 Other hazards** Toxic fumes may be released in fire situations.  
Slipping hazard.

#### Hazard summary

Physical hazards: Not classified for physical hazards.  
Health hazards: Not classified for health hazards.  
Environmental hazards: Not classified for hazards to the environment.  
Main symptoms: May cause mechanical irritation to the eyes or skin.

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances: Not Applicable

3.2 Mixture

Name	Product Identifier	Concentration	Classification (GHS-US)
Hydroxy (oxo) iron	1310-14-1	≥30% ≤ 60%	Not Classified
Styrene, divinylbenzene and ethylstyrene copolymer, chloromethyl trimethylamine functionalized in the chloride form	69011-19-4	≥35% ≤ 65%	Not Classified
Water	7732-18-5	≥35% ≤ 65%	Not Classified

Per CFR §1910.1200, the specific chemical identify and/or exact percentages (concentration) of composition has been withheld as a trade secret.

### SECTION 4: FIRST AID MEASURES

**General Information:** If potential for exposure exists refer to Section 8 for specific personal protective equipment.



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### SECTION 4: FIRST AID MEASURES (CONT'D)

#### 4.1 Description of first aid measures

Inhalation:	No emergency medical treatment necessary.
Skin contact:	Wash off with plenty of water.
Eye contact:	Immediately rinse with water for a prolonged period while holding the eyelids wide open. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. If eye irritation persists get medical attention.
Ingestion:	Rinse mouth thoroughly with water. Do NOT induce vomiting. Seek medical attention.
Notes to Physician:	No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

#### 4.2 Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

### SECTION 5: FIRE FIGHTING MEASURES

#### General fire hazards

##### 5.1 Extinguishing Media

Suitable extinguishing media:	Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.
Unsuitable extinguishing media:	No data available

##### 5.2 Special hazards arising from the substance or mixture

Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating



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### **SECTION 5: FIRE FIGHTING MEASURES (CONT'D)**

compounds. Combustion products may include and are not limited to: Organic amines. Nitrogen oxides. Hydrogen chloride. Hydrocarbons. Carbon monoxide. Carbon dioxide. Benzene compounds.

#### **5.3 Advice for firefighters**

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Special firefighting procedures: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone.

Special remarks on fire hazards: This material will not burn until the water has evaporated. Residue can burn.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel: Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

#### **6.2 Environmental Precautions**

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

#### **6.3 Methods and materials for containing and cleaning up**

Contain spilled material if possible. Sweep up. Recover spilled material if possible. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.



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### SECTION 6: ACCIDENTAL RELEASE MEASURES (CONT'D)

**6.4 Reference to other Sections**      Section 8, Section 12

### SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling**      Do not enter confined spaces unless adequately ventilated. Static electricity can accumulate on dry beads. Equipment construction material should be compatible with feed, regenerant, ionic form and effluent of the ion exchange process. Keep container closed. Avoid generating and breathing dust. Good housekeeping and controlling of dusts are necessary for safe handling of product. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**7.2 Conditions for safe storage, including any incompatibilities**      Store in a dry place. Keep container tightly closed when not in use. Preferred storage temperature is in the lower half of the range given below. Unopened containers of material stored beyond the recommended shelf life should be retested against the sales specifications before use.

**7.3 Specific end use(s)**      Water treatment

### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**8.1 Control parameters**  
Exposure limits are listed below, if they exist.  
None established

**Consult local authorities for acceptable exposure limits**

#### **8.2 Exposure Controls**

Appropriate engineering controls:

#### **Individual Protective Measures**

General Information:      Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable



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### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT'D)

exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.



Eye/face protection:

Use safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Skin protection

Hand protection:

Wear protective gloves. Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures. Examples of preferred glove barrier materials include: Polyvinyl chloride ("PVC" or "vinyl"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Neoprene. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection:

Wear clean, body-covering clothing.

Other:

Minimize skin contact.

Respiratory protection:

Under intended handling conditions, no respiratory protection should be needed.

Thermal hazards:

Not applicable

**Hygiene measures**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls**

Environmental manager must be informed of all major releases.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (CONT'D)

Form	Beads	Explosive properties	No test data available
Color	White to yellow	Explosive limit	Not applicable
Odor	Amine	Vapor pressure	Not applicable
Odor threshold	No test data available	Vapor density	Not applicable
pH	5.5 – 8.5	Evaporation rate	No test data available
Melting/freezing point	Not applicable	Relative density	1.06-1.10
Boiling point, initial boiling point and boiling range	Not applicable	Partition coefficient (n-octanol/water)	No data available
Flash point	Not applicable	Solubility (water)	Insoluble in water
Auto-ignition temperature	Not applicable	Decomposition temperature	No test data available
Flammability (solid, gas)	No test data available	Bulk density	790 g/l (49 lb./cu. Ft)
Flammability limit-lower%	Not applicable	Viscosity	Not applicable
Flammability limit-upper%	Not applicable	VOC (weight %)	0 %
Oxidizing properties	No test data available	Percent volatile	Not applicable

#### 9.2 Other Information

No relevant additional information available

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions. See Storage, Section 7.

#### 10.3 Possibility of hazardous reactions

Polymerization will not occur.

#### 10.4 Conditions to avoid

Exposure to elevated temperatures can cause product to decompose.

#### 10.5 Incompatible materials

Avoid contact with oxidizing materials. Oxidizing agents such as nitric acid attack organic exchange resins under certain conditions. Before using strong oxidizing agents, consult sources knowledgeable in handling such materials. The severity of the reaction with oxidizing materials can vary from slight degradation to an explosive reaction.

#### 10.6 Hazardous decompositions products

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Chlorinated hydrocarbons. Aromatic compounds. Hydrocarbons. Hydrogen chloride. Organic amines.



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### SECTION 11: TOXICOLOGICAL INFORMATION

#### General information on likely routes of exposure

Ingestion:	May cause discomfort if swallowed.
Inhalation:	Inhalation of dust may cause respiratory irritation. Use of this product as intended does not result in exposure to dust.
Skin contact:	Dust may irritate skin. Use of this product as intended does not result in exposure to dust.
Eye contact:	Dust may irritate eyes. Use of this product as intended does not result in exposure to dust.
Symptoms:	Exposure to dust may cause irritation of eyes, nose, throat and mucous membranes. Prolonged contact with skin may cause irritation. Use of the product as intended does not result in exposure to dust.

#### 11.1 Information on toxicological effects

Acute Toxicity:	No data were identified for this product.
Serious Eye Damage/Irritation:	May cause slight temporary eye irritation. Solid or dust may cause irritation or corneal injury due to mechanical action.
Skin corrosion/Irritation:	Prolonged exposure not likely to cause significant skin irritation. May cause more severe response if skin is abraded (scratched or cut).
Respiratory/Skin Sensitization:	No data were identified for this product.
Germ Cell Mutagenicity:	No data were identified for this product.
Carcinogenicity:	Not listed by IARC, OSHA, or NTP as a carcinogen.
Reproductive Toxicity:	No data were identified for this product.
Developmental Effects:	No data were identified for this product.
STOT – Single Exposure:	No data were identified for this product.
STOT – Repeated Exposure:	Based on available data, repeated exposures are not anticipated to cause significant adverse effects.
Aspiration Hazard:	Not relevant based on physical form of the product.





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### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1 Toxicity / Aquatic Ecotoxicity

##### Acute toxicity to fish

Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

#### 12.2 Persistence and degradability

This water-insoluble polymeric solid is expected to be inert in the environment. Surface photo degradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

#### 12.3 Bioaccumulative potential

No bio concentration is expected because of the relatively high molecular weight (MW greater than 1000).

#### 12.4 Mobility

In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.

#### 12.5 Results of PBT and vPvB assessment

Not a PBT or vPvB material

#### 12.6 Other adverse effects

This product is not classified as hazardous to the environment.

#### Conclusion/Summary

Eco toxicity data from comparable products indicates that this product is non-toxic in the environment.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

**Sewage Disposal Recommendations:** Diluted product will not disrupt waste water treatment. Do not empty into drains; dispose of this material and its container in a safe way.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

### SECTION 14: TRANSPORT INFORMATION

#### 14.1 UN Number

Not applicable, not regulated as hazardous for transport.



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### SECTION 14: TRANSPORT INFORMATION (CONT'D)

14.2 UN proper shipping name	Not applicable, not regulated as hazardous for transport.
14.3 Transport hazard class(es)	Not applicable, not regulated as hazardous for transport.
14.4 Packing group	Not applicable, not regulated as hazardous for transport.
14.5 Environmental hazards	Not applicable, not regulated as hazardous for transport.
14.6 Special precautions for user	Not applicable, not regulated as hazardous for transport.
14.7 Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	Not applicable, not regulated as hazardous for transport.

The transport regulation may vary based on the country of use. Check for the appropriate regulations in the country of transport or usage of this product.

### SECTION 15: REGULATORY INFORMATION

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

##### **OSHA Hazard Communication Standard**

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

##### **Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312**

This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.

##### **Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.



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### SECTION 15: REGULATORY INFORMATION (CONT'D)

#### **Pennsylvania Worker and Community Right-To-Know Act:**

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

#### **California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)**

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

#### **United States TSCA Inventory (TSCA)**

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

### SECTION 16: OTHER INFORMATION

<b>Date of Issue:</b>	07/11/2012
<b>Revision Date:</b>	02/28/2018
<b>Other Information:</b>	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
<b>GHS Full Text Phrases:</b>	None

**Disclaimer**

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