



Date: 08/14/2015

Revision: 00

Safety Data Sheet Starver® X

Section 1: Identification

Product Identifier:	Starver® X
Other Means of Identification:	Solution of Lanthanum Chloride and other ingredients.
Recommended Use:	Water treatment preparation; reduces phosphates in pool water.
Manufacturer's Name:	Spec Chem Direct, Inc.
Corporate Address:	6506 S 209th St., Kent, WA, 98032
Manufacturer's Telephone:	(253) 277-3143 (Monday-Friday, 8AM-5PM PT)
Emergency Phone Number:	(253) 277-3143 (Monday-Friday, 8AM-5PM PT)

Section 2: Hazard(s) Identification

Hazard Classification: This product is not classified according to the Globally Harmonized System (GHS).

Signal Word: N/A

Hazard statement(s): N/A

Pictograms: N/A

Precautionary Statement(s): N/A

Hazards Not Otherwise Classified: N/A

Ingredient(s) With Unknown Toxicity: 0% of the mixture consists of ingredient(s) with unknown acute toxicity.

Section 3: Composition/Information on Ingredients

Ingredients	% by weight	CAS #
Lanthanum Chloride	10% - 30%	10025-84-0
Other Non-Hazardous Ingredients	3% - 6%	Trade Secret
Water	to 100%	7732-18-5

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

Impurities and Stabilizing Additives, Which Are Themselves Classified and Which Contribute to the Classification of the Chemical: None

The Chemical Name and Concentration of All Ingredients Which Are Classified As Health Hazards and Are Present Above Their Cut-Off/Concentration Limits or Present a Health Risk Below the Cut-Off/Concentration Limits: None

Chemicals Where a Trade Secret Is Claimed: This product contains 3% - 6% of non-hazardous ingredients.

Section 4: First-Aid Measures

Inhalation: First aid is not generally required. If in doubt, contact a Poison Information Center or a doctor.

Skin: Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.

Eyes: No effects expected. If irritation does occur, remove contact lenses (if applicable), flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes.

Ingestion: If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poison Information Center or a doctor.

Most Important Symptoms or Effects, and Any Symptoms That Are Acute or Delayed: N/A

Recommendations for Immediate Medical Care and Special Treatment Needed, When Necessary: N/A

Section 5: Fire-Fighting Measures

Suitable / Unsuitable Extinguishing Equipment: Does not burn. Use extinguishing media appropriate for surrounding fire.

Specific Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Special Protective Equipment or Precautions for Fire Fighters: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

Section 6: Accidental Release Measures

Personal Precautions: Refer to Section 8: Exposure Controls/Personal Protection and Section 7: Handling and Storage.

Emergency Procedures: Minor spills do not normally need any special cleanup measures.

Methods and Materials for Containment and Cleanup: Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. Dispose of per guidelines under Section 13: Disposal Considerations.

Section 7: Handling and Storage

Handling: Avoid contact with eyes, skin, and clothing. User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing/PPE immediately if product gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing. Follow manufacturer's instructions for cleaning/maintaining PPE. If not such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Storage: Make sure that containers of this product are kept tightly closed. Store in original container in a cool, dry and well ventilated area away from direct heat.

Section 8: Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs): Not applicable.

American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs): Not applicable.

Any Other Exposure Limit Used or Recommended: Not applicable.

Appropriate Engineering Controls: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapors and mists are minimized.

Individual Protection Measures (Personal Protective Equipment – PPE): Eye protection such as protective glasses or goggles is recommended when this product is being used. You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product. We suggest that protective clothing be made from rubber or PVC. Usually, no respirator is necessary when using this product.

Section 9: Physical and Chemical Properties

Appearance: Blue, slightly cloudy liquid.

Odor: Mild vinegar odor.

Odor threshold: No data available.

pH: Slightly acidic.

Melting Point/Freezing Point: Below 0°C.

Initial Boiling Point and Boiling Range: Approximately 100°C at 100kPa.

Flash Point: Does not burn.

Evaporation Rate: As for water.

Flammability (Solid, Gas): Does not burn.

Upper/Lower Flammability or Explosive Limits: Does not burn.

Vapor Pressure: 2.37 kPa at 20°C (water vapor pressure).

Vapor Density: As for water.

Relative Density: No data available.

Solubility(ies): Completely soluble in water.

Partition Coefficient (n-octanol/water): No data available.

Auto-ignition Temperature: Not applicable - does not burn.

Decomposition Temperature: Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Fire decomposition products from this product are not expected to be hazardous or harmful.

Viscosity: No data available.

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.

Section 10: Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions.

Chemical Stability: Material is stable under normal temperatures.

Possibility of Hazardous Reactions: Hazardous Polymerization will not occur.

Conditions to Avoid: Keep containers tightly closed.

Incompatible Materials: No particular incompatibilities.

Hazardous Decomposition Products: Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also

formed. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Section 11: Toxicological Information

Likely Routes of Exposure (Inhalation, Ingestion, Skin and Eye Contact) and Delayed, Immediate, or Chronic Effects from Short- and Long-Term Exposure:

Inhalation:

Short term exposure: Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be irritating, but is unlikely to cause anything more than mild transient discomfort.

Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short term exposure: This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.

Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short term exposure: Significant oral exposure is considered to be unlikely. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

Long Term exposure: No data for health effects associated with long term ingestion.

Numerical Measures of Toxicity:

Oral LD₅₀: Not available.

Dermal LD₅₀: Not available.

Inhalation LC₅₀: Not available.

Description of the symptoms: Lanthanides, because of their high density, can produce abnormalities on chest x-rays.

Carcinogenicity (NTP, IARC, or OSHA): This product is not known or reported to be carcinogenic by any reference source including NTP, IARC, or OSHA.

Section 12: Ecological Information (non-mandatory)

Ecotoxicity: This product is unlikely to adversely affect the environment. Salts, acids and bases are typically diluted and neutralized when released to the environment in small quantities.

Persistence and Degradability: Not available.

Bioaccumulative Potential: This product is unlikely to adversely affect the environment. Salts, acids and bases are typically diluted and neutralized when released to the environment in small quantities.

Mobility in Soil: Not available.

Other Adverse Effects: None known.

Section 13: Disposal Considerations (non-mandatory)

Appropriate Disposal Containers: Containers should be emptied as completely as practical before disposal. If possible, recycle containers either in-house or send to recycle company. If this is not practical, send to a commercial waste disposal site.

Recommended Appropriate Disposal Methods: This product should be suitable for landfill. Can be disposed of with household waste.

Physical and Chemical Properties That May Affect Disposal Activities: None.

Special Precautions for Landfills or Incineration Activities: None.

Do not dispose of into sewer or waterways.

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

To minimize exposure, refer to Section 8: Exposure Controls/Personal Protection

Section 14: Transport Information (non-mandatory)

UN Number: Not regulated.

UN Proper Shipping Name: Not regulated.

Transport Hazard Class(es): Not regulated.

Packing Group Number, if Applicable: Not regulated.

Environmental Hazards (e.g., Marine pollutant (Yes/No)): No.

Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable.

Special Precautions Which a User Needs to Be Aware of, or Needs to Comply With, in Connection With Transport or Conveyance Either Within or Outside Their Premises: None.

Section 15: Regulatory Information (non-mandatory)

National and/or Regional Regulatory Information of the Chemical or Mixtures (Including Any OSHA, Department of Transportation, Environmental Protection Agency, or Consumer Product Safety Commission Regulations):

TSCA: Not listed on the TSCA inventory.

CERCLA Reportable Quantity (RQ): None of the ingredients is listed.

OSHA: Not considered hazardous.

EPA: Exempt from EPA code.

SARA Section 302: Does not have an RQ or TPQ.

SARA Section 311/312: Not reportable under Section 311/312.

SARA Section 313: Not reportable under Section 313.

California Proposition 65: Not applicable.

Section 16: Other Information

REVISION INFORMATION:

SDS sections(s) changed since last revision of document:

00 08/14/2015 Original SDS Document

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