

Technical Data Sheet (TDS)

Product Name: Heavy Metal Remover

Product Code: CHR-5500

Revision Date: 2025-03-18

1. Product Description

This product is a water-soluble product with low toxicity, designed to ensure compliance with stringent discharge regulations.

CHR-5500 is a new-generation heavy metal precipitant offering enhanced stability and broader pH applicability. It reacts with divalent and trivalent metal ions to form stable, low-solubility complexes that can be easily removed by sedimentation or filtration. CHR-5500 is a water-soluble, environmentally friendly product designed to ensure compliance with stringent discharge regulations.

Unlike conventional agents, which is prone to oxidation and degradation under certain conditions, CHR-5500 offers exceptional long-term stability, both in storage and in application. Its liquid form ensures easy, precise, and automated dosing, making it highly compatible with modern treatment systems.

The resulting complexes form highly stable, low-solubility precipitates that are non-toxic, non-odorous, and easy to filter, in contrast to the malodorous and sometimes environmentally problematic residues formed by other removers.

2. Application

CHR-5500 is designed for efficient and selective removal of heavy metals from industrial wastewater. It is suitable for treating effluents from industries such as electroplating, mining, metal processing, and electronics manufacturing. This product effectively precipitates metals including mercury (Hg), cadmium (Cd), copper (Cu), lead (Pb), nickel (Ni), and zinc (Zn).

3. Product Features

- High removal efficiency for heavy metals such as Hg^{2+} , Cu^{2+} , Cd^{2+} , Pb^{2+} , Ni^{2+} , Zn^{2+} , etc.
- Rapid reaction and formation of stable, low-solubility precipitates
- Effective in a broad pH range of 5–11
- Water-soluble and easy to apply
- Environmentally friendly and low toxicity
- Reduces heavy metal concentrations to meet regulatory discharge limits
- Compatible with various industrial wastewater treatment systems

4. Typical Properties

Property	Value
Appearance	yellow to orange liquid
pH (1% solution)	8.0 – 10.5
Density (20°C)	1.05 – 1.20 g/cm ³
Solubility	fully soluble in water

Note: The above data are typical values and not product specifications.

5. Usage & Dosage

Typical dosage: 30 – 100 mg/L depending on heavy metal concentrations and wastewater characteristics. Dosage should be determined by laboratory testing and process requirements. Please consult our technical service team for application support and optimization.

6. Packaging

- 25 kg / 200 kg plastic drums / 1000L IBC Tote
- Customized packaging available upon request

7. Storage & Handling

- Store in a cool, dry, and ventilated place
- Avoid exposure to direct sunlight and freezing
- Shelf life: 12 months in original unopened packaging

8. Safety & Environmental Information

- Low toxicity and environmentally responsible formulation
- Use appropriate personal protective equipment during handling
- Refer to the Safety Data Sheet - SDS for complete handling and safety guidelines

9. Compliance

Complies with relevant environmental regulations for industrial wastewater discharge standards.