

# **Product Data Sheet**

#### **PRODUCT DESCRIPTION**

RE100 is an environmentally friendly salt solution developed specifically for rapid and stable precipitation of phosphorus in municipal and industrial wastewater facilities. This rare earth chloride solution is a high performance, water-soluble coagulant that has a very strong attraction to phosphorus. RE100's targeted reaction with phosphorus greatly reduces the amount of product needed to achieve the desired final phosphorus level in the plant effluent waste stream. As a result, less chemical sludge is generated in the treatment process.

RE100 has a higher solution pH versus typical coagulants used in water treatment, thereby reducing its corrosive impact on plant equipment. RE100 also has a mild effect on water pH and less pH adjustments may be necessary to maintain target alkalinity and pH levels. RE100 is a non-hazardous solution for phosphorus treatment and does not stain or discolor facility structures or equipment. Other benefits from RE100 use include prevention of struvite, increased sludge filtration efficiency, and decreased sludge filtering time.

#### PHYSICAL & CHEMICAL PROPERTIES

**Physical State**: Liquid **Color**: Colorless to Amber

Odor: Mild

Freezing Point: -40°F (-40°C)

Aqueous Solubility: Miscible Liquid pH (neat): 3.0 - 4.0 Specific Gravity: 1.4 - 1.44

**Density**: 1.4 - 1.44 g/ml (11.75 – 12.05 lb/gal)

### SAFETY AND HANDLING

NFPA Ratings: Health 1 / Flammability 0 / Reactivity 0

Protective chemical gloves and goggles should be worn when loading, unloading, or handling RE100. Upon skin or eye contact, flush the affected area with water to avoid irritation.

RE100 should be stored away from and should not be directly mixed with highly oxidizing chemicals or liquid streams. Persons handling RE100 should consult the Safety Data Sheet prior to use.

### **PRODUCT STORAGE**

Storage tanks should be resistant to acid and chloride stress cracking. Composite materials such as polyethylene, polypropylene, rubber linings, and FRP (fiberglass reinforced plastic) are commonly used. Please verify compatibility of vessel material if uncertain.

Storage tanks/vessels must be thoroughly cleaned and flushed with water if previously occupied by another chemical solution. Premature precipitation of active ingredient may take place if storage container is not properly cleaned and flushed. RE100 can be stored at temperatures ranging from -40 to 120°F.

## PRODUCT PACKAGING/SHIPPING

- 3,600 gallon tanker truck
- 270 gallon one-way recyclable container
- Not classified as hazardous
- Not regulated by DOT, IMO/IMDG, or ICAO/IATA

#### CONTACT INFORMATION

To learn more about the benefits of RE100 or for technical assistance, please contact Neo Chemicals & Oxides.

Neo Chemicals & Oxides, LLC Corporate Headquarters 8101 East Prentice Avenue, Suite 525 Greenwood Village, CO 80111

Email: phosphorusremoval@neomaterials.com

Phone: 303-843-8065

Website: <u>www.NeoWaterTreatment.com</u>

