PersulfOx™
CATALYZED PERSULFATE

Packaging, Storage, Health and Safety

PersulfOx® is a chemical oxidation technology developed by REGENESIS for the remediation of organic contaminants in soil and groundwater which employs a patented "catalyzed persulfate" technology. PersulfOx is mixed with water and applied to the contaminated matrix via mixing equipment or subsurface injection techniques. When adding the fine dry PersulfOx powder to the mix water, proper handling and dust precautions should be followed as indicated in the Health and Safety section below (also review the MSDS).

Packaging and Storage:

PersulfOx is a dry, white, and free flowing powder delivered in 5 gallon HDPE pails or 55.1 lb (25 kg) bags. It ships as a DOT 5.1 Class Oxidizer and should be handled according to rules and regulations governing oxidizers. PersulfOx should be stored in a cool (<40^{o} C), clean, dry, and well-ventilated area and away from heat and moisture. It should not be stored with combustible or reducing materials.

Health and Safety:

PersulfOx is engineered for ease of handling in the field and can be safely mixed without the risks and potential hazards associated with most other chemical oxidants such as alkaline activated sodium persulfate. However, PersulfOx is an oxidizer/catalyst powder mixture, therefore Level C proper protective equipment (PPE) is recommended for all personnel working with or in areas of potential contact with PersulfOx. In addition, PersulfOx is an alkaline product when in solution; if left to stand for a long periods, persulfate based products can become acidic. Under either alkaline or acidic conditions PersulfOx can be caustic and corrosive and can degrade equipment surfaces.

Personal Protective Equipment (PPE)

- **Eye protection** – wear well sealed goggles or a face shield (face shield recommended for full face protection)
- **Head** – hard hat when required
- **Respiratory** – use NIOSH (P100) approved respirator when airborne dust is expected
- **Hands** – wear chemical resistant gloves (neoprene, rubber, PVC)
- **Feet** – wear steel toe shoes with chemical resistant soles or neoprene boots
- **Clothing** – wear long sleeve shirts and long pants. Consider using a Tyvek® body suit, Carhartt® coverall or splash gear
- **Engineering Controls**-ventilation is required if used indoors. Controls should be maintained to avoid creation of dusts and mists