



CAIROX® CR Potassium Permanganate Tablets are a unique “controlled release” formulation that dispenses permanganate slowly into flowing water. CAIROX CR Potassium Permanganate Tablets are designed to treat odors in municipal and industrial wastewater at remote sites, lift stations, or where feed equipment is not practical. Easy and safe to use, these tablets provide passive sulfide odor control for days before new tablets are added.

## PRODUCT SPECIFICATION

### Assay

70-80%  $\text{KMnO}_4$

## CHEMICAL/PHYSICAL DATA

### Dimensions

2 inch diameter by 3/4 inch tall tablets. Tablets weigh ~89 grams.

**Formula**  $\text{KMnO}_4$

**Formula Weight** 158.0 g/mol

**Form** Solid Tablet

**Bulk Density** Approximately 100 lb/ft<sup>3</sup>

Decomposition may start at 150 °C / 302 °F

## CORROSIVE PROPERTIES

CAIROX CR Potassium Permanganate Tablets are compatible with many metals and synthetic materials. Natural rubbers and fibers are often incompatible. Solution pH and temperature are also important factors. The material must be compatible with either the acid or alkali also being used.

In neutral and alkaline solutions, potassium permanganate is not corrosive to iron, mild steel, or stainless steel; however, chloride corrosion of metals may be accelerated when an oxidant such as permanganate is present in solution. Plastics such as polypropylene, polyvinyl chloride Type I (PVC I), epoxy resins, fiberglass reinforced plastic (FRP), Penton, Lucite, Viton A, and Hypalon are suitable. Teflon FEP and TFE, and Tefzel ETFE are best. Refer to Material Compatibility Chart.

Aluminum, zinc, copper, lead, and alloys containing these metals may be (slightly) affected by potassium permanganate solutions. Actual studies should be made under the conditions in which permanganate will be used.

## SHIPPING CONTAINERS

**23 kg pail <sup>(1)</sup> (50 lb) net**, with handle, made of HDPE, weighs 2.1lbs. (.95 kg) It is tapered to allow nested storage of empty drums, stands approximately 15.6 inches (39.7 cm) high and has a maximum diameter of 12.3 inches (31.2 cm).

## DESCRIPTION

CAIROX CR Potassium Permanganate Tablets are dark purple with a metallic sheen, sometimes with a dark bronze-like appearance. Potassium permanganate has a sweetish, astringent taste and is odorless.

## HANDLING, STORAGE, AND INCOMPATIBILITY

Protect containers against physical damage. When handling potassium permanganate, respirators should be worn to avoid irritation of or damage to mucous membranes. Eye protection should also be worn when handling potassium permanganate as a solid or in solution.

Potassium permanganate is stable and will keep indefinitely if stored in a cool, dry area in closed containers. Concrete floors are preferred to wooden decks. To clean up spills and leaks, follow the steps recommended in the *SDS*. Be sure to use goggles, rubber gloves, and respirator when cleaning up a spill or leak.

Avoid contact with acids, peroxides, and all combustible organic or readily oxidizable materials including inorganic oxidizable materials and metal powders. With hydrochloric acid, chlorine gas is liberated. Potassium permanganate is not combustible, but will support combustion. It may decompose if exposed to intense heat. Fires may be controlled and extinguished by using large quantities of water. Refer to the *SDS* for more information.