

**Potassium dichromate**, secondary standard for volumetric titrations,  
Titrasure®**Identification**

$K_2Cr_2O_7$   
M = 294,19 g/mol  
CAS [7778-50-9]  
EC number: 231-906-6  
Taric code: 2841 50 00

**Synonyms**

Potassium bichromate, Potassium pyrochromate

**Applications**

oxidizing agent, synthesis of organic products, manufacture of dyes, painting.

**Specifications**

assay (on dried sample).....min. 99,0 %  
insoluble in water..... max. 0,005 %  
chlorides (Cl).....max. 0,001 %  
sulfates (SO<sub>4</sub>).....max. 0,005 %  
calcium (Ca).....max. 0,003 %

iron (Fe)..... max. 0,001 %  
sodium (Na)..... max. 0,02 %  
loss on drying (105 °C)..... max. 0,05 %

This standard solution is traceable to Standard Reference Material from NIST.

**Physical data**

- Spec. Density: 2,69 g/cm<sup>3</sup>
- Bulk density: 1250 kg/m<sup>3</sup>
- Solub. in water: (20 °C): 130 g/l
- Melting point: 398 °C
- Boiling point: > 500 °C
- pH(100 g/l H<sub>2</sub>O, 20 °C) 3,57

**Safety - GHS**

**Signal Word:** Danger

**Hazard Statements:**

- H272: May intensify fire; oxidiser.  
H301: Toxic if swallowed.  
H330: Fatal if inhaled.  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H340: May cause genetic defects.  
H350: May cause cancer.  
H360FD: May damage fertility. May damage the unborn child.  
H372: Causes damage to organs through prolonged or repeated exposure.  
H314: Causes severe skin burns and eye damage.  
H400: Very toxic to aquatic life.  
H410: Very toxic to aquatic life with long lasting effects.  
H312: Harmful in contact with skin.  
H317: May cause an allergic skin reaction.

**Precautionary Statements:**

- P221: Take any precaution to avoid mixing with combustibles.  
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P320: Specific treatment is urgent (see on this label).  
P370+P378: In case of fire: Use ... for extinction.  
P405: Store locked up.  
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

**Transport/storage**

- ADR: 6.1 T5 II • UN 3288 • TOXIC SOLID, INORGANIC, N.O.S.(Potassium dichromate)
- IMDG: 6.1 II • UN 3288 • TOXIC SOLID, INORGANIC, N.O.S. (Potassium dichromate)
- IATA/ICAO: 6.1 II • UN 3288 • TOXIC SOLID, INORGANIC, N.O.S. (Potassium dichromate)
- PAX: 669
- CAO: 676
- 10°C - 30°C