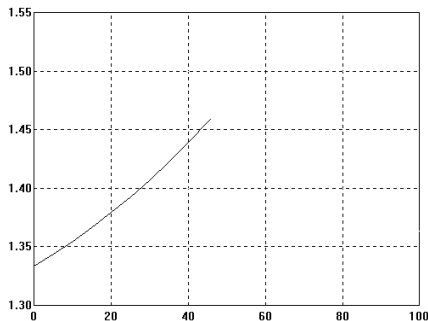


## SODIUM DICHROMATE, $\text{Na}_2\text{Cr}_2\text{O}_7 \cdot 2\text{H}_2\text{O}$

### Typical end products

Chromium metal, magnetic tapes, tanning of leather, preservation compound for timber, metal finishing, pigments for plastic and ceramic industry

Chemical curve: Sodium dichromate R.I. per Conc b.w. at Ref. Temp. of 20°C



### Introduction

Sodium dichromate ( $\text{Na}_2\text{Cr}_2\text{O}_7 \cdot 2\text{H}_2\text{O}$ ) is used in the manufacturing of chromium metal, magnetic tapes, leather tanning, timber preservation compounds and

metal finishing, as well as pigments for the plastic and ceramic industry. Other applications are used as catalysts and corrosion inhibitors, as well as in the oil and detergent industry.

### Application

Ground direct chromite ore is roasted at high temperatures in large rotary kilns with soda ash in oxidising atmosphere to render the chromium into an extractable form. This is quenched with water, then the sodium chromate is extracted and reacted with sulfuric acid to produce a commercially pure solution of sodium dichromate.

### Installation

The K-Patents Process Refractometer PR-23-GP is used in the evaporation process to control sodium dichromate liquor concentration levels.

Typical measurement range of sodium dichromate is 25-55% and the process temperature is about 85°C (185°F).

### Instrumentation



### Description

K-Patents Process Refractometer PR-23-GP is an industrial refractometer for large pipe sizes and tanks, cookers, crystallizers and kettles. Installation through a flange or clamp connection.

Measurement range:

Refractive Index (nD) 1.3200 – 1.5300, corresponding to 0-100 % by weight.