
Product Information

Potassium persulfate

Product Name: Potassium persulfate

Product Code: PB0427

CAS #: 7727-21-1

Synonyms: Potassium peroxodisulfate

Product Description

Appearance: White powder,

Molecular formula: $K_2S_2O_8$

Molecular weight: 270.33

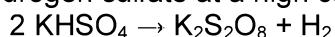
Melting Point: 100°C

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It is a food additive and it is used in organic chemistry as an oxidizing agent for instance in the Elbs persulfate oxidation, and in hair dye substances as whitening agent with hydrogen peroxide. It takes also an important role as initiator for emulsion polymerization.

Preparation

Potassium persulfate can be prepared by electrolysis of a mixture between potassium sulfate and hydrogen sulfate at a high current density.



It can also be prepared by adding potassium bisulfate ($KHSO_4$) to an electrolyzed solution of ammonium bisulfate (NH_4HSO_4).

Another reaction of its formation is the following (although the practical use of it is doubtful).



Solubility

Potassium persulfate soluble in water: 1.75 g/100 mL (0 °C), 5.29 g/100 ml (20 °C)

Storage

Store at room temperature.

Precautions

Conditions/substances to avoid are: heat, flames, ignition sources, powdered metals, phosphorus, hydrides, organic matter, halogens, acids and alkalis.