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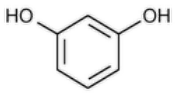
Resorcinol



$C_6H_6O_2$ 110.11

1,3-Benzenediol

Resorcinol CAS RN®: 108-46-3; UNII: YUL4LO94HK.

» Resorcinol contains not less than 99.0 percent and not more than 100.5 percent of $C_6H_6O_2$, calculated on the dried basis.

Packaging and storage—Preserve in well-closed, light-resistant containers.

USP Reference standards ⟨11⟩—

USP Resorcinol RS

Identification—

Change to read:

A: ▲*Spectroscopic Identification Tests* ⟨197⟩, *Infrared Spectroscopy: 197K*▲ (CN 1-May-2020) — [Note—If necessary to recrystallize, dissolve in dehydrated alcohol.]

B: Dissolve 100 mg in 2 mL of 1 N sodium hydroxide, add 1 drop of chloroform, and heat the mixture: an intense crimson color is produced. Then add a slight excess of hydrochloric acid: the color changes to pale yellow.

C: To 10 mL of a solution (1 in 100) add 1 drop of ferric chloride TS: a blue-violet color is produced, and it fades slowly.

Melting range ⟨741⟩**:** between 109° and 111°.

Loss on drying ⟨731⟩—Dry it over silica gel for 4 hours: it loses not more than 1.0% of its weight.

Residue on ignition ⟨281⟩**:** not more than 0.05%.

Phenol—Heat gently a solution (1 in 20): the odor of phenol is not perceptible.

Catechol—To 10 mL of a solution (1 in 20) previously mixed with 2 drops of 1 N acetic acid add 0.5 mL of lead acetate TS: no turbidity is produced.

Ordinary impurities ⟨466⟩—

Test solution: methanol.

Standard solution: methanol.

Eluant: a mixture of hexanes and ethyl acetate (70:30).

Visualization: 17 and then 1.

Application volume: 10 µL.

Limits: not more than 1.0%.

Assay—Dissolve about 1.5 g of Resorcinol, accurately weighed, in water to make 500.0 mL. Transfer to an iodine flask 25.0 mL of the resulting solution, add 50.0 mL of 0.1 N bromine VS, dilute with 50 mL of water, add 5 mL of hydrochloric acid, and at once insert the stopper in the flask. Shake for 1 minute, allow to stand for 2 minutes, and add 10 mL of potassium iodide TS while slightly loosening the stopper. Shake thoroughly, allow to stand for 5 minutes, remove the stopper, and rinse it and the neck of the flask with 20 mL of water into the flask. Titrate the liberated iodine with 0.1 N sodium thiosulfate VS, adding starch TS as the endpoint is approached. Perform a blank determination. From the volume of 0.1 N sodium thiosulfate VS used, calculate the volume, in mL, of 0.1 N bromine VS consumed by the resorcinol. Each mL of 0.1 N bromine is equivalent to 1.835 mg of $C_6H_6O_2$.

Topic/Question	Contact	Expert Committee
RESORCINOL	Documentary Standards Support	SM32020 Small Molecules 3
REFERENCE STANDARD SUPPORT	RS Technical Services RSTECH@usp.org	SM32020 Small Molecules 3

Chromatographic Database Information: Chromatographic Database

Most Recently Appeared In:
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