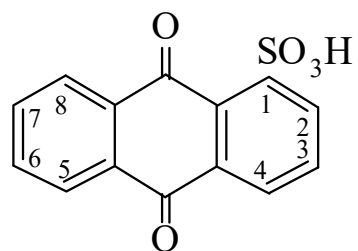




>>Entry Name: Anthraquinone-1-sulfonic acid

Synonym(s): 9,10-Dihydro-9,10-dioxo-1-anthracenesulfonic acid, 9Cl. α -Sulfoanthraquinone



CAS Registry Number: 82-49-5

Molecular Formula: $C_{14}H_8O_5S$

Molecular Weight: 288.28

Accurate Mass: 288.009245

Percentage Composition: C 58.33%; H 2.80%; O 27.75%; S 11.12%

Use/Importance: Corrosion inhibitor, low acute mammalian toxicity

Physical Description: Yellow leaflets + 3H₂O (H₂O), anhyd. cryst. (AcOH)

Melting Point: Mp 218°

Solubility: V. sol. H₂O

pKa Value: pK_a 0.27 (20°)

Rare Chemicals Library: S12700-0

>>Derivative: Na salt

CAS Registry Number: 128-56-3

Physical Description: Yellow leaflets + 1H₂O

Solubility: Spar. sol. H₂O

Hazard & Toxicity: Eye irritant

>>Derivative: Me ester

CAS Registry Number: 52868-98-1

Molecular Formula: $C_{15}H_{10}O_5S$

Molecular Weight: 302.307

Accurate Mass: 302.024895

Percentage Composition: C 59.60%; H 3.33%; O 26.46%; S 10.61%

Physical Description: Bright-orange cryst. by subl.

Melting Point: Mp 192-193°

>>Derivative: Chloride

Molecular Formula: $C_{14}H_7ClO_4S$

Molecular Weight: 306.726

Accurate Mass: 305.975357

Percentage Composition: C 54.82%; H 2.30%; Cl 11.56%; O 20.86%; S 10.45%

Physical Description: Yellow needles (PhNO₂)

Melting Point: Mp 216-218°

References:

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Lauer, K., *J. Prakt. Chem.*, 1931, **130**, 214; 1932, **135**, 173, (synth)

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