



Formula: C₁₄H₈O₄

MW: 240.22

CAS: 72-48-0

MDL: MFCD00001201

TNP: TNP00462

1,2-Dihydroxy-anthrachinon; 1,2-dihydroxy-anthraquinon; 10-Anthracenedione,1,2-dihydroxy-9;
9,10-Anthracenedione, 1,2-dihydroxy-; 9,10-Anthracenedione,1,2-dihydroxy-;
Alizarin(c.1.No.5800); Aliazrin; Alizarin B



LogP: 1.71

LogS: -3.28

Acceptors: 4

Donors: 2

Rotation Bonds: 2

Chiral Centers: 0

N+O: 4

LIPINSKY: 4

Info: Alizarin 97%. Occurs in root of madder plant, *Rubia Tinctorum*

IUPAC: 1,2-dihydroxyanthracene-9,10-dione

Smiles: c12C(c3ccccc3C(c1ccc(c2O)O)=O)=O

Specification: Intermediates of Dyes and Pigments; Anthraquinones, Hydroquinones and Quinones; Anthraquinones; Hydroxyanthraquinones 1,2-Dihydroxy-9,10-anthracenedione
Chemical Properties:

mp 287 C bp 430 C density 1.06 g/mL at 20 C Fp 430C subl. Colour Index 58000 Merck 14,251
BRN 1914037 Stability:Stable. Incompatible with strong oxidizing agents, strong bases. CAS
DataBase Reference72-48-0(CAS DataBase Reference) NIST Chemistry
ReferenceAlizarin(72-48-0) EPA Substance Registry System9,10-Anthracenedione,
1,2-dihydroxy-(72-48-0) Safety Information Hazard Codes Xi Risk Statements 36/38-36/37/38
Safety Statements 26-36-24/25-22 WGK Germany 3 RTECS YO8300000
1,2-Dihydroxy-9,10-anthracenedione English 1,2-Dihydroxy-9,10-anthracenedione Usage And
Synthesis Chemical Properties:

orange-red crystals or powder 1,2-Dihydroxy-9,10-anthracenedione Preparation
ProductsAlizarin Fluorine Blue Raw materialsSodium hydroxide-->Potassium
nitrate-->Anthraquinone-->Potassium chlorate-->2-Anthraquinonesulfonic acid-->Sodium
anthraquinone-2-sulfonate

Merck 13 Reference: Monograph Number: 0000246

Title: Alizarin

CAS Registry Number: 72-48-0

CAS Name: 1,2-Dihydroxy-9,10-anthracenedione

Additional Names: 1,2-dihydroxyanthraquinone; C.I. Mordant Red 11; C.I. Pigment Red 83;
C.I. 58000

Molecular Formula: C₁₄H₈O₄

Molecular Weight: 240.21.

Percent Composition: C 70.00%, H 3.36%, O 26.64%

Literature References: Occurs in the root of the madder plant (*Rubia tinctorum* L., Rubiaceae; Krappwurz) in combination with 2 mols glucose, called ruberythric acid. Was known and used in ancient Egypt, Persia, and India. Synthesized from 2-anthraquinonesulfonic acid sodium salt : Caro et al., Ber. 3, 359 (1870); Perkin, Ber. 9, 281 (1876). Historical review: Fieser, J. Chem. Educ. 7, 2609 (1930). Laboratory prepn: Gattermann-Wieland, Laboratory Methods of Organic Chemistry (New York, 1937). Modern methods of manufacture: Pohl, Ullmanns Encyklop