

HYDROQUINONE

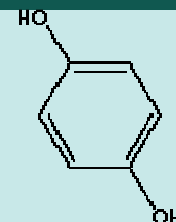
PRODUCT IDENTIFICATION

CAS NO.	123-31-9
EINECS NO.	204-617-8
FORMULA	$C_6H_4(OH)_2$
MOL WT.	110.11
H.S. CODE	2907.29

TOXICITY Oral rat LD50: 320 mg/kg

SYNONYMS 1,4-Dihydroxybenzene; p-Dihydroxybenzene; 1,4-Benzenediol;

Quinol; 1,4-benzenediol; p Benzendiol; Benzoquinol; 1,4-Hydroxybenzene; p-Hydroquinone; p-Dihydroxybenzene; 1,4-Benzendil; Aida; Black and White Bleaching Cream; Eldoquin; Elopaque; quinnone; 1, 4-dihydroxy-benzen (Dutch); 1,4-Dihydroxybenzen (Czech); 1,4-Dihydroxy-benzol (German); 1,4- Diidrobenzene (Italian); Hydrochinon (Czech, Polish); Idrochinone (Italian); 对苯二酚 (Chinese); 对苯二酚又名氢醌 (Chinese); Hidroquina (Spanish);



DERIVATION

CLASSIFICATION

GENERAL DESCRIPTION OF DIHYDROXYBENZENE

There are three isomeric compounds of dihydroxybenzene molecule structure, which all have traditional names respectively. The ortho (1,2) isomer is called catechol (Also known as catechin; pyrocatechol; pyrocatechuic acid), which forms clear crystals used as a photographic developer in solution and as a starting material to produce synthetic catecholamines which have important physiological effects as neurotransmitters and hormones (such as epinephrine, adrenaline, norepinephrine, and dopamine). The meta (1,3) isomer is resorcinol (also known as resorcin), which forms clear needle crystals used in the production of diazo dyes and plasticizers. It is produced by sulfonating benzene with fuming sulfuric acid and fusing the resulting benzenedisulfonic acid with caustic soda. Resorcinol is used in resins as an UV absorber. It is used in manufacturing fluorescent and leather dyes and adhesives. Reaction with formaldehyde produces resins (resorcinol formaldehyde resins) used to make rayon and nylon. It is used as a pharmaceutical to treat acne and other greasy skin conditions in combination with other acne treatments such as sulfur. It is used as an anti-dandruff agent in shampoo and sunscreen cosmetics. It is also used as a chemical intermediate to synthesis pharmaceuticals and other organic compounds. The para (1,4) isomer is hydroquinone (also known as quinol), which forms clear prisms used as a photographic reducer and developer (except in color film). It is formed in large quantities by chemical reduction of benzoquinone. This compound is a general-purpose inhibitor, stabilizer, antioxidant, and intermediate. One of the major uses of hydroquinone is as an intermediate to make other inhibitors, stabilizers, antioxidants, agricultural chemicals, and dyes.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	light tan, light gray or colorless crystalline solid
MELTING POINT	170 C
BOILING POINT	285 C
SPECIFIC GRAVITY	1.33
SOLUBILITY IN WATER	7g/100g
pH	
VAPOR DENSITY	3.81
NFPA RATINGS	Health: 3 Flammability: 1 Reactivity: 0
REFRACTIVE INDEX	
FLASH POINT	165 C
STABILITY	Stable under ordinary conditions. But this chemical darkens on exposure to

air and light

APPLICATIONS

This compound is a good general-purpose inhibitor, stabilizer, antioxidant, and intermediate. It is used as a photographic reducer and developer (except in color film). One of the major uses for hydroquinone is an intermediate to make other inhibitors, stabilizers, antioxidants, agricultural chemicals, and dyes.

SALES SPECIFICATION

PHOTO GRADE

APPEARANCE	light tan, light gray or colorless crystalline solid
ASSAY	99.5% min
MELTING POINT	171 - 175 C
ASH	0.04% max
HEAVY METALS	10ppm max
IRON	10ppm max
WATER	0.1% max

TECH GRADE

ASSAY	99.0% min
MELTING POINT	169.5 C min
LOSS ON DRYING	0.3% max
ASH	0.3% MAX

TRANSPORTATION

PACKING	25kgs in fiber drum
HAZARD CLASS	6.1
UN NO.	2662