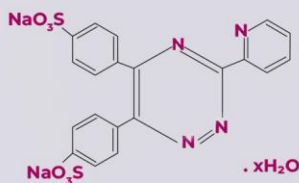


# FERROZINE



## PRODUCT IN FOCUS



## Ferrozine

### INTRODUCTION

Ferrozine, chemically 3-(2-Pyridyl)-5,6-bis(4-phenylsulfonic acid)-1,2,4-triazine disodium salt, is a water-soluble solid. It is a complexometric reagent for detection and estimation of iron.

### Manufacture

It is synthesized by condensation of 2,6-dimethyl pyridine with 3,5-dinitrobenzenesulfonic acid, followed by reduction with Fe powder, and then sulfonation with fuming sulfuric acid. Purification occurs via crystallization from water.

### Applications

- ✓ Determine the iron content in food, water, chemicals, and biological samples
- ✓ Study the metabolism of iron in cells and tissues
- ✓ Monitor the environmental pollution caused by heavy metals
- ✓ Preparation of iron complexes for catalysis
- ✓ Synthesis of iron nanoparticles for biomedicine
- ✓ Develop new sensors, biomaterials, and drug delivery systems
- ✓ Improve efficacy and safety of existing medicinal treatments
- ✓ Numerous other applications in scientific experiments, especially in the fields of analytical chemistry, biochemistry, and environmental science

#### Synonym

3-(2-Pyridyl)-5,6-diphenyl-1,2,4-triazine-4',4''-disulfonic acid sodium salt

#### CAS no.

28048-33-1

#### EINECS no.

248-797-6

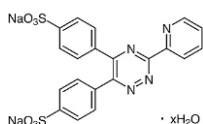
#### Molecular formula

C<sub>20</sub>H<sub>12-13</sub>N<sub>4</sub>Na<sub>1-2</sub>O<sub>6</sub>S<sub>2</sub>·xH<sub>2</sub>O

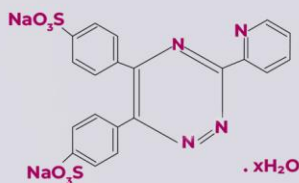
#### Molecular weight

468.47 (anion)

#### Structure



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### SPECIFICATIONS

Test	Unit	Specification
Appearance	-	Greenish yellow powder
Solubility (C5%; w/v. in acetate buffer, pH 5.5)	-	Yellow, clear
Identification by UV (c = 1%, w/v, d = 1 cm)	-	Should correspond to standard Max 282-284 nm Specific Extinction at absorption Max 385-465
Identification by IR	-	Should correspond to standard
Sodium by flame photometry, based on hydrous substance	%	4.0 - 9.0
KF Water	%	≤10.0
Assay Ferrozine anion (Photometric), based on hydrous substance	%	90.0 - 110.0

### STORAGE

Stored at ambient temperature.

### PACKING

25 kg drum.

### REACH Status

Not registered yet.

No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please contact us.