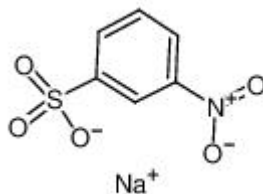


FC-039 (CAS 127-68-4) Sodium 3-nitrobenzenesulphonate**BASIC INFORMATION**

Cas: 127-68-4
Name: Sodium 3-nitrobenzenesulphonate
Sodium 3-Nitrobenzenesulfonate;3-Nitrobenzenesulfonic acid,sodium salt;3-Nitrobenzenesulfonic Acid Sodium Salt;sodium,3-nitrobenzenesulfonate;Sodium 3-Nitrobenzenesulphonate;
Molecular formula: C₆H₄NNaO₅S
Molecular weight: 225.15400
PSA: 111.40000
LOGP: 2.10290

PHYSICAL INDEX

Appearance and properties: off-white to yellow powder
Density: 1.637g/cm³
Boiling point: 215-219° C
Melting point: 350 ° C
Flash point: 100 ° C
Water solubility: 200 g/L (20 °C)
Stability: Stable. Hygroscopic. Incompatible with strong oxidizing agents.
Storage conditions: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

SECURITY INFORMATION

RTECS number: DB7195000
Safety instructions: S24-S26-S37
Hazard category code: R36; R43
WGK Germany: 1
Customs code: 2904209090
Dangerous goods mark: Xi

**PRODUCTION
METHODS AND
APPLICATION**

production method

In the enamel kettle, first add 350 parts of fuming sulfuric acid, control the temperature of the kettle to 0~5° C, slowly add nitrobenzene under stirring, add 132 parts of nitrobenzene within 1h, and raise the temperature of the kettle to 100° C, keep warm 2h. Sampling to measure the end point of sulfonation (drop 1 to 2 drops of material into a 10ml test tube filled with clear water, and no turbidity proves to the end point). After the sulfonation reaction is completed, it is cooled, slowly added to ice water, and 2,000 parts of table salt are added in about 3h. After salting out for a few hours, let it stand overnight, suction filter, and press dry to obtain the intermediate m-nitrobenzenesulfonic acid. Put m-nitrobenzene sulfonic acid into 500 parts of hot water and boil to dissolve it. Remove a small amount of sulfone. Add 50 parts of soda ash for neutralization, then add activated carbon for decolorization, filter while hot, and cool the filtrate to crystallize. After the filter cake is washed with a small amount of water, it is dried below 50° C to obtain the finished product.

use

It is a dye intermediate, used as an anti-dyeing agent for vat dyes and sulfur dyes, and as a color-forming protective agent for dyes. It can also be used as a ship's anti-rust agent and electroplating nickel removal agent.