

【Product Name】

2,2'-Bipyridine

【Synonyms】

2-(2-Pyridyl)pyridine

2,2'-Bipyridine

2-Pyridin-2-ylpyridine

【CAS】

366-18-7

【Formula】

C₁₀H₈N₂

【Molecular Weight】

156.19

【EINECS】

206-674-4

【RTECS】

DW1750000

【RTECS Class】

Agricultural Chemical and Pesticide; Tumorigen; Drug; Mutagen; Reproductive Effector

【Merck】

13,3382

【Beilstein/Gmelin】

113089

【Beilstein Reference】

5-23-08-00016

【EC Class】

toxic

Physical and Chemical Properties

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【Appearance】

White crystals.

【Solubility in water】

5 g/L

【Melting Point】

70 - 72

【Boiling Point】

273

【Vapor Pressure】

.00001

【Density】

1.326 g/cm³ (-150 C)

【pKa/pKb】

9.67 (pKb)

【Heat Of Vaporization】

41.55 kJ/mol

【Heat Of Combustion】

-186 kJ/mol

【Usage】

As a reagent for the determination of iron.

First Aid Measures

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【Ingestion】

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

【Inhalation】

Remove from exposure to fresh air immediately. Get medical aid if cough or other symptoms appear.

【Skin】

Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

【Eyes】

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Handling and Storage

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【Storage】

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

【Handling】

Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Do not ingest or inhale.

Hazards Identification

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【Inhalation】

Dust is irritating to the respiratory tract.

【Skin】

Causes skin irritation.

【Eyes】

Causes eye irritation.

【Ingestion】

Harmful if swallowed. May cause irritation of the digestive tract.

【Hazards】

Contact with metals may evolve flammable hydrogen gas.

【EC Risk Phrase】

R 20/21/22 36/37/38

【EC Safety Phrase】

S 22 26 36/37/39

【UN (DOT)】

2811

Exposure Controls/Personal Protection

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【Personal Protection】

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate protective gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to minimize contact with skin.

【Respirators】

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

【Exposure Effects】

No data were available to assess the potential effects of exposure to this agent during pregnancy or lactation.
Animal studies on chick for substituted pyridines have shown teratogenicity. Injected chicken eggs develop leg and skeletal malformations.

【Poison Class】

3

Fire Fighting Measures

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【Flash Point】

121

【Fire Fighting】

Wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved

or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Runoff from fire control or dilution water may cause pollution. Extinguishing media: Use agent most appropriate to extinguish fire. In case of fire, use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

【Fire Potential】

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

Accidental Release Measures

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【Small spills/leaks】

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, using the appropriate protective equipment. Avoid generating dusty conditions. Provide ventilation.

Stability and Reactivity

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【Disposal Code】

3

【Stability】

Stable at room temperature in closed containers under normal storage and handling conditions.

【Incompatibilities】

Strong oxidizers.

【Decomposition】

Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

【Combustion Products】

Fire may produce irritating, corrosive and/or toxic gases.

Transport Information

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【UN Number】

2811

【Hazard Class】

6.1

【Packing Group】

I; II; III

【HS Code】

2933 39 99