



LABORATORY CHEMICALS AND CONSUMABLES

# MATERIAL SAFETY DATA SHEET

## FUCHSIN BASIC

### 1. Chemical Product and Company information.

**Product name:** Basic Fuchsin

**Contact Information:**

Radchem cc  
PO Box 166982  
Brackendowns  
Alberton 1454  
Telephone : **011 867 3726 / 2864**

### 2. Hazard Identification

Hazardous in case of skin contact (permeator), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

### 3. Composition / information on ingredients

**CAS #:** 569-61-9

**Synonym:** Basic Fuchsin, C.I. 42500, Basic Red 9 hydrochloride, C.I. Basic Red 9 monohydrochloride; Paramagenta, Basic Red 9, C.I. Basic Red 9 hydrochloride, Basic Parafuchsine, Pararosanilin; 4,4'((4-imino-2,5-cyclohexadien-1-ylidene)methylene) dianiline monhydrochloride; Pararosanine Chloride; Pararosanine Hydrochloride; p-Fuchsin

**Chemical Name:** Benzenamine, 4((4-aminophenyl) (4-imino-2,5-cyclohexadien-1-ylidene)methyl), monhydrochloride

**Chemical Formula:** C<sub>19</sub>-H<sub>18</sub>-ClN<sub>3</sub> or C<sub>19</sub>-H<sub>17</sub>-N<sub>3</sub>.HCl

### 4. First Aid Measures

**Eye Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. WARM water MUST be used. Get medical attention.

**Skin Contact:** In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact:** Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.



**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

#### **5. Fire-fighting measures**

**Flammability of the Product:** May be combustible at high temperature.

**Fire Hazards in Presence of Various Substances:** Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

**Explosion Hazards in Presence of Various Substances:** Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

**Fire Fighting Media and Instructions:** SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** As with most organic solids, fire is possible at elevated temperatures. When heated to decomposition it emits very toxic fumes of hydrogen chloride and nitrogen oxides.

**Special Remarks on Explosion Hazards:** Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

#### **6. Accidental release measures**

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

#### **7. Handling and storage**

**Precautions:** Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, acids, alkalis.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

#### **8. Exposure controls/personal protection**

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:** Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self



contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### **9. Physical and chemical properties**

**Physical state and appearance:** Solid (crystalline powder)

**Odour:** Odourless

**Taste:** Not available

**Colour:** Green (Dark)

**Boiling Point:** Not available

**Melting Point:** Decomposition temperature: 268°C - 270 C

**Critical Temperature:** Not available

**Odour Threshold:** Not available

**Ionicity (in Water):** Cationic.

**Dispersion Properties:** Not available

**Solubility:** Very slightly soluble in cold water, diethyl ether. Soluble in alcohol. Solubility in water: 2-3 mg/ml water. Solubility in ethanol: 2-25 mg/ml ethanol.

**Specific Gravity:** Not available

**Vapour Density:** 1.6 @ 19C (Air=1)

**Volatility:** Not available

### **10. Stability and reactivity**

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Excess heat, dust generation, incompatible materials

**Incompatibility with various substances:** Reactive with oxidizing agents, reducing agents, acids.

**Corrosivity:** Non-corrosive in presence of glass

**Special Remarks on Reactivity:** Aniline is incompatible with acetic anhydride, chlorosulphonic acid, hexachlormelamine, nitric acid, nitric acid + nitrogen tetroxide and sulphuric acid, nitrobenzene and glycerin, oleum, ozone, perchloric acid + formaldehyde, perchromates, performic acid, trichloromelamine, anilinium chloride, benzenediazonium-2-carboxylate, boron trichloride, 1-chloro 2,3-epoxypropane, dibenzoyl peroxide, nitromethane, nitrous acid, and tetranitromethane. Destroyed by strong oxidizing agents. Readily reduced to leuco-bases with a variety of reducing agents sensitive to photochemical oxidation.

**Special Remarks on Corrosivity:** Not available

**Polymerization:** Will not occur.

### **11. Toxicological information**

**Routes of Entry:** Absorbed through skin. Dermal contact. Inhalation. Ingestion

**Toxicity to Animals:** Acute oral toxicity (LD50): 5000 mg/kg [Mouse].

**Chronic Effects on Humans:** CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. Classified 2 (Some evidence – anticipated carcinogen.) by NTP. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. May cause damage to the following organs: blood, liver, spleen, thyroid.

**Other Toxic Effects on Humans:** Hazardous in case of skin contact (permeator), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).



**Special Remarks on Toxicity to Animals:** Not available

**Special Remarks on Chronic Effects on Humans:** May affect genetic material (mutagenic). May cause cancer.

**Special Remarks on other Toxic Effects on Humans:** Potential Health Effects: Skin: May cause skin irritation. It may be absorbed through the skin in harmful amounts. Effects from skin absorption may be similar to that of inhalation and ingestion. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Eyes: May cause eye irritation. May cause corneal damage. Inhalation: May cause respiratory tract irritation. Ingestion: Causes gastrointestinal tract irritation with colicky pain, nausea, vomiting and diarrhoea, dryness of the throat. May affect respiration and cause cyanosis. Exposure from skin absorption, inhalation or ingestion may cause methemoglobinemia and cyanosis. Symptoms of methemoglobinemia may include: greyish/bluish colouring of the skin, which may also appear with out signs of cardiac or pulmonary insufficiency, navy blue to black mucous membranes, dyspnoea, shortness of breath, central nervous system effects headache, dizziness, lethargy, ataxia, vertigo, muscle contraction or spasticity, weakness, faintness, disorientation, confusion, tinnitus, drowsiness, convulsions, tremor, seizures, paresthesias, muscle pain, coma-, cardiovascular system effects - heart blocks, and arrhythmias, tachycardia, vascular dystonia, cardiovascular collapse-, sluggish papillary reaction, weakness of vision, photophobia. It may also affect the urinary system (oliguria, renal insufficiency, kidney damage, hemoglobinuria, painful micturition, hematuria, methemoglobinuria), liver, metabolism (weight loss), blood (anaemia, chocolate coloured blood), spleen, thyroid, pituitary gland.

## **12. Ecological information**

**Ecotoxicity:** Not available

**BOD5 and COD:** Not available

**Products of Biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise..

**Toxicity of the Products of Biodegradation:** The products of degradation are more toxic than the product itself.

**Special Remarks on the Products of Biodegradation:** Not available

## **13. Disposal considerations**

**Waste Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## **14. Transport information**

**DOT Classification:** Not a DOT controlled material

**Identification:** Not applicable

**Special Provisions for Transport:** Not available

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