4-NITROANILINE

CALCULATED RESPONSE INFORMATION

Common Synonyms
1. Azoic-4-crotonobenzene
2. Azocrotonobenzene
3. Fast red G base
4. p-Nitroaniline

Solid Yellow Mild Odor

KEEP PEOPLE AWAY. AVOID CONTACT WITH SOLID AND DUST. 
Avoid inhalation.
Wear dust respirator.
Call fire department.
Notify local health and pollution control agencies.
Protect water intakes.

Exposure

CALL FOR MEDICAL AID.
DUST
POISONOUS IF INHALED.
If inhaled will cause headache, coughing, difficult breathing, or loss of consciousness.
In eyes: hold eyelids open and flush with plenty of water.
If breathing has stopped: give artificial respiration.
If breathing is difficult: give oxygen.

Water

HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS.
May be dangerous if it enters water intakes.
Notify local health and(wildlife officials.
Notify operators of nearby water intakes.

1. CORRECTIVE RESPONSE ACTIONS

Stop discharge
Contain
Collection Systems: Skim; dredge
Dilute and disperse
Do not burn

2. CHEMICAL DESIGNATIONS

2.1 CG Compatibility Group: Not listed.
2.2 Formulas: 1: C8H9N2O6
2.3 IMO/UN Designation: 6.1/1661
2.4 DOT ID No.: 165
2.5 CAS Registry No.: 100-01-6
2.6 NAERG Guide No.: 153
2.7 Standard Industrial Trade Classification: 51454

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: Bu.
Mines dust mask; rubber gloves; chemical safety goggles;
face shield; rubber safety shoes.

3.2 Symptoms Following Exposure: Inhalation or ingestion causes headache, drowsiness, shortness of
breath, nausea, meningitis, and unconsciousness; fingers, lips, and ears become bluish; prolonged and excessive exposures may also cause liver damage. Contact with eyes causes irritation and possible corneal damage. Contact with skin causes irritation; continued exposure may cause same symptoms as inhalation or ingestion.

3.3 Treatment of Exposure: INHALATION: remove victim from fresh air; administer oxygen if required; get medical attention. INGESTION: induce vomiting; get medical attention. EYES: flush with water for at least 15 min. SKIN: flush with water, wash with soap and water; be sure that no compound remains in the hair or under the fingernails.

3.4 TLV-TWA: 3 mg/m³ (air)
3.5 TLV-STEL: Not listed.
3.6 TLV-CEILING: Not listed.
3.7 Toxicity by Ingestion: Grade 2; LD₅₀ = 0.5-5.6 g/kg
3.8 Toxicity by Inhalation: Currently not available.
3.9 Chronic Toxicity: Currently not available
3.10 Vapor (Gas) Irritant Characteristics: Currently not available
3.11 Liquid or Solid Characteristics: Currently not available
3.12 Odor Threshold: Currently not available
3.13 IDUH Value: 300 mg/po
3.14 OSHA PEL-TWA: 1 ppm
3.15 OSHA PEL-STEL: Not listed.
3.16 OSHA PEL-Ceiling: Not listed.
3.17 EPA AEGL: Not listed

4. FIRE HAZARDS

4.1 flash Point: 329°F O.C. (millin solid)
4.2 Flammable Limits in Air: Not pertinent
4.3 Fire Extinguishing Agents: Water, foam, dry chemical, or carbon dioxide
4.4 Fire Extinguishing Agents Not to Be Used: Currently not available
4.5 Special Hazards of Combustion Products: Toxic oxides of nitrogen may form in fire.
4.6 Behavior in Fire: Melts and burns
4.7 Auto Ignition Temperature: Currently not available
4.8 Electrical Hazards: Not pertinent
4.9 Burning Rate: Not pertinent
4.10 Adiabatic Flame Temperature: Currently not available
4.11 Stoichiometric Air to Fuel Ratio: 35.7 (calc.)
4.12 Flame Temperature: Currently not available
4.13 Combustion Molar Ratio (Reactant to Product): 12:0 (calc.)
4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed

5. CHEMICAL REACTIVITY

5.1 Reactivity with Water: No reaction
5.2 Reactivity with Common Materials: Currently not available
5.3 Stability During Transport: Stable
5.4 Neutralizing Agents for Acids and
Causatives: Not pertinent
5.5 Polymerization: Not pertinent
5.6 Inhibitor of Polymerization: Not pertinent

6. WATER POLLUTION

6.1 Aquatic Toxicity: 24 ppm; no dermal toxicity/fresh water
6.2 Waterfowl Toxicity: Not currently available
6.3 Biological Oxygen Demand (BOD): Not currently available
6.4 Food Chain Potential: Not currently available
6.5 GESAMP Hazard Profile: Not listed

7. SHIPPING INFORMATION

7.1 Grades of Purity: Technical, 100%
7.2 Storage Temperature: Ambient
7.3 Inert Atmosphere: No requirement
7.4 Venting: Open
7.5 IMO Pollution Category: Currently not available
7.6 Ship Type: Currently not available
7.7 Barge Hull Type: Currently not available

8. HAZARD CLASSIFICATIONS

8.1 49 CFR Code: Poison
8.2 49 CFR Classification: 6.1
8.3 49 CFR Package Group: II
8.4 Marine Pollution: Not pertinent
8.5 NFPA Hazard Classification:
Category Classification
Health Hazard (Blue): 3
Flammability (Red): 1
Toxicity (Yellow): 3
8.6 EPA Reportable Quantity: 5000 pounds
8.7 EPA Pollution Category: D
8.8 RONA Waste Number: P077
8.9 EPA FWPCA List: Not listed

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical State at 15°C and 1 atm: Solid
9.2 Molecular Weight: 138.1
9.3 Boiling Point at 1 atm: 638°F = 338°C = 609°F
9.4 Freezing Point: 295°F = 146°C = 419°F
9.5 Critical Temperature: Not pertinent
9.6 Critical Pressure: Not pertinent
9.7 Critical Volume: Not pertinent
9.8 Liquid Surface Tension: Not pertinent
9.9 Liquid Water Interface Tension: Not pertinent
9.10 Vapor (Gas) Specific Gravity: Not pertinent
9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent
9.12 Latent Heat of Vaporization: Not pertinent
9.13 Heat of Combustion: –9,920 Btu/lb = –5,510 cal/g = –231 X 10³ J/kg
9.14 Heat of Decomposition: Not pertinent
9.15 Heat of Solution: Not pertinent
9.16 Heat of Polymerization: Not pertinent
9.17 Heat of Fusion: 36.50 cal/g
9.18 Limiting Value: Currently not available
9.19 Reid Vapor Pressure: Currently not available

NOTES:

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### 4-NITROANILINE

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