



## MATERIAL SAFETY DATA SHEETS

28

Aminopterin

### 1. CHEMICAL IDENTITY

**Chemical Name :** Aminopterin

**Chemical Classification:** Toxic

**Trade Name :**

**Synonyms:** 4-Aminofolic acid, 4-Aminopteroylglutamic acid, L-Glutamic acid, N-[4-[[[(2,4-diamino-6-pteridiny]methyl]amino]benzoyl]-

**Formula :** C<sub>19</sub>H<sub>20</sub>N<sub>8</sub>O<sub>5</sub>

**CAS No:** 54-62-6

**UN No:**

#### Regulated Identification

**Shipping Name :**

**Hazchem Code :**

**Codes / Label :**

**Hazardous Waste ID No :**

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
1 Aminopterin	54-62-6	3	
2		4	

### 2. PHYSICAL / CHEMICAL DATA

**Boiling Pt. °C:**

**Physical State:** Solid

**Appearance:** Clusters of yellow needles.

**Melting Pt °C:** 260-265 (decompose s) [L-form]

**Vapour Pressure @ 35°C mmHg:** 2.3X10<sup>-19</sup> mg Hg /Estimated/

**Odour:**

**Vapour Density(Air =1):** >1

**Solubility in water at 30°C g/100ml:** 3.0X10<sup>3</sup> mg/L at 25 °C /Estimated/

**Others:** Soluble in aqueous sodium hydroxide solutions.

**Specific Gravity (Water =1 ):**

**pH :**

### 3. FIRE / EXPLOSION HAZARD DATA

**Flammability :**

**LEL:**

**Flash Point °C in OC:**

**TDG Flammability:**

**UEL:**

**Flash Point °C in CC:**

**Autoignition Temperature °C :**

**Explosion sensitivity to impact:**

**Explosion sensitivity to static Electricity:**

**Hazardous Combustion Products :** When heated to decomposition, it emits fumes of NO<sub>x</sub>.

**Hazardous Polymerization :**

**Combustible Liquid:**

**Explosive Material:**

**Corrosive Material**

**Flammable Material:**

**Oxidiser :**

**Others:**

**Pyrophoric Material:**

**Organic Peroxide :**

### 4. REACTIVITY DATA

**Chemical Stability :** Stable at normal temperatures and pressures.

**Incompatibility with other material :** Strong oxidizing agents.

**Reactivity :**

**Hazardous** : Oxides of carbon and nitrogen.

**Reaction Products**

**5. HEALTH HAZARD DATA**

**Routes of entry:** Inhalation, skin, eyes and ingestion

**Effects of Exposure / Symptoms:**

May be fatal if inhaled, ingested or absorbed through the skin. Causes irritation of skin and eyes. Chronic exposure may cause congenital malformations of the fetus.

**Emergency Treatment :**

**Inhalation:** If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Skin:** Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

**Eyes:** If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**Ingestion:** Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. If possible, do not leave individual unattended.

**LD50 (oral-rat) mg/kg:** 3 mg/kg

**STEL:**

**LC50 (rat) mg/kg:**

**Odour Threshold:**

**Permissible Exposure Limit:**

**TLV (ACGIH) :**

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals		1	0	

**6. PREVENTIVE MEASURES**

**Personal Protective Equipment** : Chemical splash goggles, chemical resistant gloves. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**Handling** : Do not breath dust, get in eyes, on skin or on clothing. Avoid prolonged or repeated exposure. Always work in a chemical hood and while using the recommended protective equipment.

**Storage** : Cool dry location in a tightly sealed container. Avoid exposure to light.

**Precautions** :

**7. EMERGENCY / FIRST AID MEASURES**

**FIRE:**

**Fire Extinguishing Media** : Use dry chemical, carbon dioxide, water spray, or alcohol foam extinguishers.

**Special Procedure** : Wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Unusual Hazards** : Poisonous gases are produced in fire including nitrogen oxides.

**EXPOSURE: First Aid Measures:**

**Inhalation:** If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Skin:** Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

**Eyes:** If symptoms develop, immediately move individual away from exposure and into

fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**Ingestion:** Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. If possible, do not leave individual unattended.

**Antidotes / Dosages:**

**SPILLS :**

**Steps To Be Taken** : Do not touch spilled material; stop leak if you can do so without risk. See "Additional Information"

**Waste Disposal Method:**

**8. ADDITIONAL INFORMATION / REFERENCES**

Spillage treatment: Use water spray to reduce vapors. Small spills: absorb with sand or other noncombustible absorbent material and place into containers for later disposal. Small dry spills: with clean shovel place material into clean, dry container and cover; move containers from spill area. Large spills: dike far ahead of spill for later disposal.

**9. MANUFACTURERS / SUPPLIERS DATA**

<b>NAME OF FIRM :</b>	<b>Contact person</b>
<b>MAILING ADDRESS :</b>	<b>in Emergency :</b>
<b>TELEPHONE / TELEX NOS :</b>	<b>Local Bodies involved :</b>
<b>TELEGRAPHIC ADDRESS :</b>	<b>Standard Packing :</b>
<b>OTHERS :</b>	<b>Trem Card Details / Ref :</b>

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