

Common Name: **ANILINE**

Synonyms: Aminobenzene; Phenylamine

CAS No: 62-53-3

 Molecular Formula: C₆H₅NH₂

RTK Substance No: 0135

Description: Colorless to brown, oily liquid

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
2 - Health 2 - Fire 0 - Reactivity DOT#: UN 1547 ERG Guide #: 153 Hazard Class: 6.1 (Poisonous)	COMBUSTIBLE LIQUID Use dry chemical, CO ₂ , water spray or foam as extinguishing agents. POISONOUS GASES ARE PRODUCED IN FIRE , including <i>Nitrogen Oxides</i> . Use water spray to keep fire-exposed containers cool. Vapor is heavier than air and may travel a distance to cause a fire or explosion far from the source.	Aniline reacts violently with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) and STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC) and may cause fires and explosions. Aniline is not compatible with ACETIC ANHYDRIDE; CHLOROSULFONIC ACID; STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC); ALKALIES (such as METAL HYDROXIDES and METAL CARBONATES); STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE); and TOLUENE DIISOCYANATES.

SPILL/LEAKS
Isolation Distance:

Small Spills: 60 meters (200 feet)

Large Spills: 270 meters (900 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and deposit in sealed containers.

This substance is very toxic to aquatic organisms.

PHYSICAL PROPERTIES

Odor Threshold:	0.58 to 10 ppm
Flash Point:	158°F (70°C)
LEL:	1.3%
UEL:	11%
Vapor Density:	3.2 (air = 1)
Vapor Pressure:	0.6 mm Hg at 68°F (20°C)
Specific Gravity:	1 (water =1)
Water Solubility:	Slightly soluble
Boiling Point:	363°F (184°C)
Ionization Potential:	7.7 eV
Molecular Weight:	93.1

EXPOSURE LIMITS

OSHA:	5 ppm, 8-hr TWA
NIOSH:	Lowest feasible concentration
ACGIH:	2 ppm, 8-hr TWA
IDLH LEVEL:	100 ppm

PROTECTIVE EQUIPMENT

Gloves:	Butyl, Silver Shield®/4H® and Viton (>8-hr breakthrough)
Coveralls:	DuPont Tychem® CPF 2, CPF 4, BR, LV, SL, TK and Responder®; Kappler Zytron® 200; and Saint-Gobain ONESuit®/TEC or equivalent (>8-hr breakthrough)
Respirator:	>2 ppm - full facepiece APR with Organic vapor cartridge >20 ppm - Supplied air

HEALTH EFFECTS

Eyes:	Irritation with possible eye damage
Skin:	Irritation and skin rash
Inhalation:	Nose and throat irritation with coughing and wheezing Headache, dizziness and blue color to the skin and lips (methemoglobinemia) Fatigue, drowsiness, convulsions, disturbance of speech, upset stomach and unconsciousness

FIRST AID AND DECONTAMINATION

Remove the person from exposure.
Flush eyes with large amounts of water for at least 30 minutes. Remove contact lenses if worn. Seek medical attention immediately.
Quickly remove contaminated clothing. Wash contaminated skin with large amounts of soap and water. Seek medical attention immediately.
Begin artificial respiration if breathing has stopped and CPR if necessary.
Transfer to a medical facility.