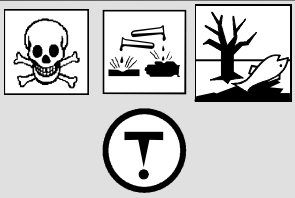
TCI AMERICA

Material Safety Data Sheet

HAZARD WARNINGS	RISK PHRASES	PROTECTIVE CLOTHING
	**Toxic compound, do not ingest or inhale. Avoid all contact with this material.** **Corrosive to eyes and skin on contact.** **Combustible material; avoid heat and sources of ignition.** **Environmental hazard.** **POSSIBLE CARCINOGEN. MINIMIZE EXPOSURE.** **POSSIBLE MUTAGEN. MINIMIZE EXPOSURE.** **Combustible material; avoid heat and sources of ignition.**	

Section I. Chemical Product and Company Identification

Chemical Name **Aniline**

Catalog Number	A0463
Synonym	Aminobenzene CI 76000
Chemical Formula	C_6H_7N
CAS Number	62-53-3

Supplier: TCI America
9211 N. Harborgate St.
Portland OR
1-800-423-8616

In case of Emergency Call **Chemtrec®**
(800) 424-9300 (U.S.)
(703) 527-3887 (International)

Section II. Composition and Information on Ingredients

Chemical Name	CAS Number	Percent (%)	TLV/PEL	Toxicology Data
Aniline	62-53-3	----------	This chemical is classified as a possible carcinogen. There is no acceptable exposure limit for a carcinogen. This compound is classified as a possible mutagen. There is no acceptable exposure limit for a mutagen.	Rat LD_{50} (oral) 250 mg/kg Rabbit LD_{50} (dermal) 820 mg/kg Mouse LC_{50} (inhalation) 464 mg/m^3 /4H

Section III. Hazards Identification

Acute Health Effects

Toxic if ingested or inhaled. Avoid prolonged contact with this material. Overexposure may result in serious illness or death. Corrosive to skin, eyes, and respiratory system. Liquid or spray mist may produce tissue damage, particularly in mucous membranes of the eyes, mouth and respiratory tract. Skin contact may produce burns. Eye contact can result in corneal damage or blindness. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Corrosive materials may cause serious injury if ingested.

Chronic Health Effects

CARCINOGENIC EFFECTS : Not available.
MUTAGENIC EFFECTS : Not available.
TERATOGENIC EFFECTS : Tumorigenic Effectis.
Rat TDLo Oral 11 gm/kg, 29 weeks continuous.
TOXIC Effects:
Tumorigenic - Neoplastic by RTECS criteria.
Kidney, Ureter, and Bladder - Tumors
DEVELOPMENTAL TOXICITY: Reproductive Effects.
Mouse TDLo Oral 4480 mg/kg, female 6-13 Days of pregnancy.
TOXIC Effects:
Effects on Newborn - Growth statistics (e.g., reduced weight gain)
Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section IV. 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. Get medical attention.

Skin Contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Inhalation

If the victim is not breathing, perform mouth-to-mouth resuscitation. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, oxygen can be administered. Seek medical attention if respiration problems do not improve.

Ingestion

DO NOT INDUCE VOMITING. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive.

Continued on Next Page **Emergency phone number (800) 424-9300**

Section V. Fire and Explosion Data

Flammability	Combustible.	Auto-Ignition	Not available.
Flash Points	75°C (167°F).	Flammable Limits	Not available.
Combustion Products	These products are toxic carbon oxides (CO, CO_2), and nitrogen oxides (NO_x).		
Fire Hazards	Not available.		
Explosion Hazards	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.		
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet. Consult with local fire authorities before attempting large scale fire-fighting operations.		

Section VI. Accidental Release Measures

Spill Cleanup Instructions	Toxic Material. Corrosive Material. Combustible Material. Environmentally Hazardous Material. Possible Carcinogenic Material. Possible Mutagenic Material. Keep away from heat. Mechanical exhaust required. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. DO NOT get water inside container. DO NOT touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Consult federal, state, and/or local authorities for assistance on disposal.

Section VII. Handling and Storage

Handling and Storage Information	TOXIC. CORROSIVE. COMBUSTIBLE. ENVIRONMENTAL. POSSIBLE CARCINOGEN. POSSIBLE MUTAGEN. Keep locked up.. Keep container dry. Keep away from heat. Mechanical exhaust required. Avoid excessive heat and light. DO NOT ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Treat symptomatically and supportively. Always store away from incompatible compounds such as oxidizing agents, acids, alkalis (bases).

Section VIII. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash station and safety shower is proximal to the work-station location.
Personal Protection	Face shield. Lab coat. Vapor respirator. Boots. Gloves. A MSHA/NIOSH approved respirator must be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. 
Exposure Limits	This chemical is classified as a possible carcinogen. There is no acceptable exposure limit for a carcinogen. This compound is classified as a possible mutagen. There is no acceptable exposure limit for a mutagen.

Section IX. Physical and Chemical Properties

Physical state @ 20°C	Liquid. (Light Yellow, Clear)	Solubility	Miscible with Alcohol, benzene, chloroform, and most other organic solvents. Soluble in water (3.4 g/100 ml at 20°C). 1 gram dissolves in 28.6 ml water: 15.7 ml boiling water.
Specific Gravity	1.02 (water=1)		
Molecular Weight	93.13	Partition Coefficient	Not available.
Boiling Point	184°C (363.2°F)	Vapor Pressure	0.1 kPa (@ 20°C)
Melting Point	-6°C (21.2°F)	Vapor Density	3.22 (Air = 1)
Refractive Index	Not available.	Volatility	Not available.
Critical Temperature	Not available.	Odor	Characteristic.
Viscosity	1.4 Pas at 20°C	Taste	Burning.

Section X. Stability and Reactivity Data

Stability	This material is stable if stored under proper conditions. (See Section VII for instructions)
Conditions of Instability	Avoid excessive heat and light.
Incompatibilities	Reactive with oxidizing agents, acids, alkalis (bases), alkali metals and alkali earth metals, aluminum, zinc, iron and iron salts.

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Section XI. Toxicological Information

RTECS Number	BW6650000
Routes of Exposure	Eye Contact. Ingestion. Inhalation. Skin contact.
Toxicity Data	Rat LD_{50} (oral) 250 mg/kg Rabbit LD_{50} (dermal) 820 mg/kg Mouse LC_{50} (inhalation) 464 mg/m^3/4H
Chronic Toxic Effects	**CARCINOGENIC EFFECTS** : Not available. **MUTAGENIC EFFECTS** : Not available. **TERATOGENIC EFFECTS** : Tumorigenic Effectis. Rat TDLo Oral 11 gm/kg, 29 weeks continuous. TOXIC Effects: Tumorigenic - Neoplastic by RTECS criteria. Kidney, Ureter, and Bladder - Tumors **DEVELOPMENTAL TOXICITY**: Reproductive Effects. Mouse TDLo Oral 4480 mg/kg, female 6-13 Days of pregnancy. TOXIC Effects: Effects on Newborn - Growth statistics (e.g., reduced weight gain) Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.
Acute Toxic Effects	Toxic if ingested or inhaled. Avoid prolonged contact with this material. Overexposure may result in serious illness or death. Corrosive to skin, eyes, and respiratory system. Liquid or spray mist may produce tissue damage, particularly in mucous membranes of the eyes, mouth and respiratory tract. Skin contact may produce burns. Eye contact can result in corneal damage or blindness. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Corrosive materials may cause serious injury if ingested.

Section XII. Ecological Information

Ecotoxicity	Not available.
Environmental Fate	Aniline's production and use as a chemical intermediate in the synthesis of explosives, rubber accelerators, isocyanates, herbicides, pesticides, dyes and its use as a solvent may result in its release to the environment through various waste streams. If released to air, a vapor pressure of 0.49 mm Hg at 25 deg C indicates aniline will exist solely as a vapor in the ambient atmosphere. Vapor-phase aniline will be degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the half-life for this reaction in air is estimated to be 4 hours. Aniline can also be degraded in the atmosphere by reaction with nitrate radicals and ozone molecules, but these reaction rates are too long to be environmentally important. Aniline absorbs light greater than 290 nm and may undergo direct photolysis in the atmosphere. If released to soil, aniline is expected to have high to moderate mobility based upon Koc values of 43.8-497.7 in 5 European soils. Volatilization from moist soil surfaces is expected to be an important fate process based upon a Henry's Law constant of 2.02X10-6 atm-cu m/mole. Aniline is not expected to volatilize from dry soil surfaces based on its vapor pressure. Aniline was completely degraded by a soil inoculum in 4 days. If released into water, aniline may adsorb to suspended solids and sediment in water based upon the Koc data. Aniline was biodegraded 70-100% in river water over a 7 day incubation period. Volatilization from water surfaces is expected to be an important fate process based upon this compound's Henry's Law constant. Estimated volatilization half-lives for a model river and model lake are 12 and 131 days, respectively. A pKa value of 4.6, suggests that aniline will exist partially in the protonated form in aqueous environments and the protonated form of aniline is not expected to volatilize from water. Measured BCF values of less than 10 in fish suggest that bioconcentration in aquatic organisms is low. Occupational exposure to aniline may occur through inhalation and dermal contact with this compound at workplaces where aniline is produced or used.

Section XIII. Disposal Considerations

Waste Disposal	Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

Section XIV. Transport Information

DOT Classification	DOT CLASS 6.1: Toxic Material
PIN Number	UN1547
Proper Shipping Name	Aniline(**RQ:**5000 lbs)
Packing Group (PG)	II
DOT Pictograms	

Continued on Next Page Emergency phone number (800) 424-9300

Section XV. Other Regulatory Information and Pictograms

TSCA Chemical Inventory (EPA)	This compound is **ON** the EPA Toxic Substances Control Act (TSCA) inventory list.
WHMIS Classification (Canada)	On DSL.
EINECS Number (EEC)	200-539-3
EEC Risk Statements	R23/24/25- Toxic by inhalation, in contact with skin and if swallowed. R34- Causes burns. R51- Toxic to aquatic organisms. R53- May cause long-term adverse effects in the aquatic environment. R45- May cause cancer. R46- May cause heritable genetic damage. R47- May cause birth defects.
Japanese Regulatory Data	ENCS No. 3-105

Section XVI. Other Information

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