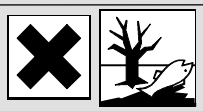
TCI AMERICA

Material Safety Data Sheet

HAZARD WARNINGS	RISK PHRASES	PROTECTIVE CLOTHING
	**Harmful compound, minimize exposure.** **Irritating to skin, eyes, and the respiratory system.** **Environmental hazard.** **This material is toxic to aquatic organisms and may cause long term adverse effects to the aquatic environment.** **Light sensitive.** **Store under inert gas.**	

Section I. Chemical Product and Company Identification

Chemical Name **2-Aminophenol**

Catalog Number	A0335
Synonym	Phenol, 2-amino- (CA INDEX NAME); CI# 76520
Chemical Formula	C_6H_7NO
CAS Number	95-55-6

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
2-Aminophenol	95-55-6	Min. 97.0 (T)	Not available.	Rat LD_{50} (oral) 951 mg/kg Guinea Pig LD_{50} (dermal) >1gm/kg Rat LD_{50} (subcutaneous) 37 mg/kg

Section III. Hazards Identification

Acute Health Effects

Harmful if ingested or inhaled. Minimize exposure to this material. Severe overexposure can result in injury or death.
Irritating to eyes and skin on contact. Inhalation causes irritation of the lungs and respiratory system. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

Chronic Health Effects

CARCINOGENIC EFFECTS : Not available.
MUTAGENIC EFFECTS : Not available.
TERATOGENIC EFFECTS : Not available.
DEVELOPMENTAL TOXICITY: Reproductive effects.
Hamster TDLo Intraperitoneal 150 mg/kg, female 8 days of pregnancy
TOXIC EFFECTS:
Effects on Fertility - Post-implantation mortality
Specific Developmental Abnormalities - Central nervous system
Specific Developmental Abnormalities - Eye, ear
Hamster TDLo Intraperitoneal 150 mg/kg, female 8 days of pregnancy
Specific Developmental Abnormalities - Body wall
Specific Developmental Abnormalities - Musculoskeletal system
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

INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. 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	May be combustible at high temperature.	Auto-Ignition	190°C (374°F)
Flash Points	168°C (334.4°F)	Flammable Limits	Not available.
Combustion Products	These products are toxic carbon oxides (CO, CO_2), nitrogen oxides (NO, NO_2).		
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	Harmful material. Irritating material. Environmentally hazardous material. Light sensitive material. Stop leak if without risk. DO NOT get water inside container. DO NOT touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all sources of ignition. Consult federal, state, and/or local authorities for assistance on disposal.

Section VII. Handling and Storage

Handling and Storage Information	HARMFUL. IRRITANT. ENVIRONMENTAL HAZARD. LIGHT SENSITIVE. STORE UNDER INERT GAS. Keep locked up. Keep away from heat. Mechanical exhaust required. When not in use, tightly seal the container and store in a dry, cool place. Avoid excessive heat and light. DO NOT ingest. Do not breathe dust. 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.

Section VIII. 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. 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	Not available.

Section IX. Physical and Chemical Properties

Physical state @ 20°C	Solid. (Light yellow ~ reddish-yellow, powder ~ crystal.)	Solubility	Soluble in water (20g/L 20°C), alcohol, ether. Very slightly soluble in hexane, benzene.
Specific Gravity	1.33 (water=1)		
Molecular Weight	109.13	Partition Coefficient	LOG P_{ow}: 0.62
Boiling Point	Not available.	Vapor Pressure	19 hPa (@ 153°C)
Melting Point	175°C (347°F)	Vapor Density	3.77 (Air = 1)
Refractive Index	Not available.	Volatility	Not available.
Critical Temperature	Not available.	Odor	Not available.
Viscosity	Not available.	Taste	Not available.

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. Sensitive to light. Store under inert gas.
Incompatibilities	Reactive with oxidizing agents, acids, acid anhydrides, acid chlorides, chloroformates.

Continued on Next Page

Section XI. Toxicological Information

RTECS Number	SJ4950000
Routes of Exposure	Eye Contact. Ingestion. Inhalation.
Toxicity Data	Rat LD_{50} (oral) 951 mg/kg Guinea Pig LD_{50} (dermal) >1gm/kg Rat LD_{50} (subcutaneous) 37 mg/kg
Chronic Toxic Effects	**CARCINOGENIC EFFECTS** : Not available. **MUTAGENIC EFFECTS** : Not available. **TERATOGENIC EFFECTS** : Not available. **DEVELOPMENTAL TOXICITY**: Reproductive effects. Hamster TDLo Intraperitoneal 150 mg/kg, female 8 days of pregnancy TOXIC EFFECTS: Effects on Fertility - Post-implantation mortality Specific Developmental Abnormalities - Central nervous system Specific Developmental Abnormalities - Eye, ear Hamster TDLo Intraperitoneal 150 mg/kg, female 8 days of pregnancy Specific Developmental Abnormalities - Body wall Specific Developmental Abnormalities - Musculoskeletal system 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	Harmful if ingested or inhaled. Minimize exposure to this material. Severe overexposure can result in injury or death. Irritating to eyes and skin on contact. Inhalation causes irritation of the lungs and respiratory system. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

Section XII. Ecological Information

Ecotoxicity	Not available.
Environmental Fate	2-Aminophenol's production and use as a photographic developer, corrosion inhibitor in paints and 2-cycle engine fuels, as a chemical intermediate and as a dye for leather, fur, and hair may result in its release to the environment through various waste streams. If released to air, an estimated vapor pressure of 5.0X10-4 mm Hg at 25 deg C indicates 2-aminophenol will exist in both the vapor and particulate phases in the ambient atmosphere. Vapor-phase 2-aminophenol 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 5 hours. Particulate-phase 2-aminophenol will be removed from the atmosphere by wet and dry deposition. If released to soil, 2-aminophenol is expected to have very high mobility based upon an estimated Koc of 50. However, anilines (aromatic amines) are expected to bind strongly to humus or organic matter in soils due to the high reactivity of the aromatic amino group, suggesting that mobility may be much lower in some soils. pKa values of 4.84 and 10.01 indicate that this compound will exist primarily as the neutral species in the environment. Volatilization from moist soil surfaces is not expected to be an important fate process for this compound based upon an estimated Henry's Law constant of 2.7X10-10 atm-cu m/mole for the neutral species. 2-Aminophenol is not expected to volatilize from dry soil surfaces based upon its vapor pressure. Based on several aerobic screening studies using various inocula, this compound appears to be slowly biodegraded under most aerobic study circumstances. Under denitrifying conditions in sediment, 2-aminophenol was mineralized following a long lag phase at a rate of 12.9 umol/l/day. It was not mineralized under methanogenic conditions in a 26-week sediment grab sample study. If released into water, 2-aminophenol is not expected to adsorb to suspended solids and sediment based upon the estimated Koc. However, this compound may adsorb strongly to humic or organic material in the water because it is an aromatic amine. Volatilization from water surfaces is not expected to be an important fate process based upon this compound's estimated Henry's Law constant. An estimated BCF of 2 suggests the potential for bioconcentration in aquatic organisms is low. Occupational exposure to 2-aminophenol may occur through inhalation and dermal contact with this compound at workplaces where 2-aminophenol is produced or used. The general population may be exposed dermally through the use of consumer products such as hair dyes.

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	UN2512
Proper Shipping Name	Aminophenols (o-; m-; p-)
Packing Group (PG)	III
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)	CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). On DSL.
EINECS Number (EEC)	202-431-1
EEC Risk Statements	R20/21/22- Harmful by inhalation, in contact with skin and if swallowed. R36/37/38- Irritating to eyes, respiratory system and skin. R51- Toxic to aquatic organisms. R53- May cause long-term adverse effects in the aquatic environment.
Japanese Regulatory Data	ENCS No. 5-4999

Section XVI. Other Information

Version 1.0
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Printed 2/23/2010.

Notice to Reader

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