



SAFETY DATA SHEET

1. Identification:

Product Identifier: Aniline, Aniline Oil, Phenylamine, Aminophen, Benzenamine
Product code: BA4028
Synonym(s): Aniline, Dry, Distilled ASTM-D-611
Recommended use: Manufacture of other chemical products, professional, scientific, and technical activities.
Recommended restrictions: None known.

Manufacturer/Supplier/Distributor Information

Company name: Biopharm Inc.
Address: 187 South Tilley Road
Hatfield, AR 71945
Telephone: (870) 389-6114
Website: www.bphchem.com
E-mail: support@bphchem.com
Emergency phone number: Chemtrec 800-424-9300

2. Hazard(s) identification:

Classification: This chemical is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 4
Acute toxicity Oral	Category 3
Acute toxicity, Dermal	Category 3
Serious eye damage	Category 1
Skin sensitisation	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity - repeated exposure	Category 1-Blood
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Label elements:



Signal word: Danger

Hazard statement: Extremely hazardous liquid and vapor! Aniline is highly toxic by all routes of exposure! May be fatal if inhaled, swallowed, or absorbed through skin. Irritating to eyes, respiratory system and skin. May cause serious eye damage. Possible risk of irreversible effects. May cause cyanosis. Target organs identified are the central nervous system, blood, bladder, and lungs. Possible carcinogen. Possible mutagen.

Precautionary statement:

Prevention	Use only outdoors or in a well-ventilated area or chemical fume hood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection. Wash thoroughly after handling. Keep away from heat, sparks, and open flame. Replace cap when not in use.
Response	IF EXPOSED OR CONCERNED: Get medical advice/attention. Call a physician or poison control center if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. If swallowed: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (OR HAIR): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, seek medical advice/attention.
Storage	Store bottles tightly capped and upright. Keep in a cool place. Store locked up.
Disposal	To be performed in compliance with all current local, state and federal regulations.
Hazard(s) not otherwise classified (HNOC):	None known.
Supplemental information:	No information available.

3. Composition/information on ingredients**Mixtures**

<u>Chemical Name</u>	<u>CAS number</u>	<u>%</u>
Aniline	62-53-3	100

4. First-aid measures

Inhalation:	Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, have trained person administer oxygen. Obtain medical help.
Ingestion:	Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a poison control center.
Skin contact:	Immediately flush with cool, running water for at least 15 minutes. Call a physician.
Eye contact:	Immediately flush with cool, running water for at least 15 minutes. Occasionally lift upper and lower lids to ensure rinsing under them. Seek medical assistance immediately.

Most important symptoms/effects, acute and delayed:	Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., cyanosis, headache, vomiting, nausea, Incoordination.fatigue,dizziness,drowsiness,confusion., Weakness, Unconsciousness, Symptoms may be delayed.To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
General information:	Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Carbon oxides, Nitrogen oxides (NOx)
Special protective equipment and precautions for firefighters	Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.
Fire-fighting equipment/instructions	Firefighters should wear full protective gear. Evacuate the area promptly. Fight fire from upwind to avoid exposure to combustion products. Cool containers/tanks with water spray. Do not get water inside container. Move containers from fire area if it can be done without risk. Prevent fire-extinguishing water from contaminating surface water or the ground water system.
NFPA	Health: 3 Flammability: 2 Reactivity: 0

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures:	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep out of low areas. Ensure adequate ventilation. Avoid inhalation of vapors or mists.
Methods and materials for containment and cleaning up:	Ventilate the contaminated area. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Large Spills: Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewer, basements, or confined areas. Following product recovery, flush area with water. Small Spills: Absorb spillage with noncombustible, absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for reuse. For waste disposal, refer to section 13 of the SDS. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental precautions: Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses, or onto the ground. Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for safe storage, including any incompatibilities: Keep ampoules sealed until needed. Keep in a cool place away from direct sunlight.

8. Exposure controls/personal protection

Exposure Guidelines:

<u>Component</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
Aniline	2 ppm mg/m ³ (TWA) 7.6 mg/m ³ (TWA) skin: BEI	5 ppm (TWA) 19 mg/m ³ (TWA) And Homologues Skin

Engineering measures: In case of insufficient ventilation, use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment:

Eye/face protection: Wear protective eyeglasses or chemical safety goggles.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance: Colorless, oily liquid; Darkens with age & exposure to light.

Odor: Characteristic odor

Odor threshold: No data available

Vapor Pressure (mm Hg): 1 @ 35°C

Vapor density (Air = 1): 3.2

pH: 8.8 at 36 g/l at 20 °C (68 °F)

Relative density: 0.9 g/cm³

Melting point/freezing point: Melting point/range: -6 °C (21 °F) - lit.

Solubility in Water: 3.6 g/100 ml @ 18°C

Boiling Point (°F): 363 (184°C)

Flash point: 158°F (Tag closed cup)

Evaporative Rate (H₂O = 1): No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits

Flammability limit - lower No data available

Flammability limit - upper	No data available
Explosive limit – lower	Lower explosion limit: 1.3 %(V)
Explosive limit - upper	Upper explosion limit: 23 %(V)
Partition coefficient: n-octanol/water	log Pow: 0.91
Auto-ignition temperature:	No data available
Decomposition temperature:	190 °C (374 °F) -
Viscosity:	No data available
Other information:	
Specific Gravity (H₂O = 1):	1.02
Percent Volatile by Volume:	Negligible

10. Stability and reactivity

Reactivity:	This product is stable and nonreactive under normal conditions of use, storage, and transport.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization will not occur.
Conditions to avoid:	Excessive heat or flame.
Incompatible materials:	Oxidizing agents, Iron and iron salts., Zinc
Hazardous decomposition products:	Other decomposition products - No data available

11. Toxicological information

Information on likely routes of exposure:

Ingestion:	May cause irritation, nausea, vomiting, and diarrhea.
Inhalation:	May cause drowsiness and dizziness. May cause irritation to the respiratory system.
Skin Contact:	May cause slight or mild irritation to the skin.
Eye Contact:	May cause severe irritation to the eyes. Splashes may cause severe pain, eye damage and permanent blindness.

Information on toxicological effects

Acute toxicity This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.

<u>Component</u>	<u>LD₅₀ Oral</u>	<u>LD₅₀ Dermal</u>	<u>LC₅₀ Inhalation</u>
Aniline	250 mg/kg (rat)	836 mg/kg (rabbit)	4 h - 248 ppm (mouse)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Toxic in contact with skin.
Serious eye damage/irritation	Severe eye irritation.
Respiratory Sensitization	May cause sensitisation by skin contact.
Skin sensitization	May cause sensitisation by skin contact.

Carcinogenicity	This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.
Mutagenic effects	No data available.
Reproductive effects	No data available.
STOT – single exposure	No data available.
STOT – repeated exposure	Causes damage to organs through prolonged or repeated exposure. - Blood
Aspiration hazard	No data available.
Chronic effects	The major effect from chronic inhalation exposure to aniline in humans is the formation of methemoglobin, which can cause cyanosis (interference with the oxygen-carrying capacity of the blood). Aniline is severely irritating to mucous membranes and affects the eyes, skin, and upper respiratory tract in humans.

12. Ecological information

Ecotoxicity:	Very toxic to aquatic life.
Persistence and degradability:	No data available
Bioaccumulation/ Accumulation:	No data available
Mobility in soil:	No data available
Other adverse effects:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

13. Disposal considerations

Waste disposal methods:	To be performed in compliance with all current local, state and federal regulations. Spills onto sand, soil, or other absorbent may be handled by placing the affected soil into approved containers then label and store for proper treatment or disposal.
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14. Transport information

DOT:	
UN number:	UN1547
UN proper shipping name:	Aniline
Hazard class(es)	6.1
Subsidiary class(es)	N/A
Packing group	II
Other information	Small quantity exceptions

15. Regulatory information

U.S. Federal regulations	
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not listed
U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Listed
CERCLA Hazardous Substances List (40 CFR 302.4)	Listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories	Immediate Hazard – Yes
	Delayed Hazard – Yes
	Fire Hazard – Yes
	Pressure Hazard – No
	Reactivity Hazard – No

Other Federal regulations

Clean Air Act	Not regulated
Clean Water Act	Not regulated
California Prop 65	WARNING: This product contains a chemical known to the State of California to cause cancer.

16. Other information, including date of preparation or last revision

Revision date	May 24, 2023
Disclaimer	The statements contained herein are offered as informational data only and are believed to be correct. However, this product should be handled by persons having related technical skills, and at their own discretion and risk. Since seller has no control over the use of this product, no warranty, expressed or implied, is made and seller assumes no liability in connection with any use of this information or from contact and/or handling of this product.