Analytyka ®
REACTIVOS Y MATERIAS PRIMAS ESPECIALES

PROFEPA:	01-800-770-3372
SETIQ:	01-800-002-1400
PROTECCION CIVIL:	01-800-004-1300

AMPEX CHEMICALS, S.A. DE C.V., SANTA ANA 577, ESCOBEDO, N.L., MEX. 66055, TEL: (81) 8307-2043

2-CHLOROBENZYLAMINE, 97% (GC)

1. Product Identification

Synonyms: None
CAS No.: 89-97-4
Molecular Weight: 141.60
Chemical Formula: ClC6H4CH2NH2
Product Codes: C0184

2. Composition/Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
89-97-4	2-Chlorobenzylamine	97%	201-955-8

3. Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear yellow liquid. Flash Point: 88 deg C.
Danger! Corrosive. Causes eye and skin burns. **Combustible liquid and vapor.** May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. May cause central nervous system depression. May cause cardiac disturbances. May cause liver and kidney damage. May cause methemoglobinemia. Air sensitive.
Target Organs: Blood, kidneys, central nervous system, liver, cardiovascular system, blood forming organs.

Potential Health Effects

Eye: Causes eye burns. May cause chemical conjunctivitis and corneal damage.
Skin: Causes skin burns. May cause cyanosis of the extremities. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.
Ingestion: Causes gastrointestinal tract burns. May cause liver and kidney damage. May cause perforation of the digestive tract. May cause cardiac disturbances. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death. May cause central nervous system depression. May cause systemic effects.
Inhalation: May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, tachycardia, dyspnea (labored breathing), and death. May cause liver and kidney damage. Causes chemical burns to the respiratory tract. Aspiration may lead to pulmonary edema. May cause cardiac abnormalities. May cause systemic effects. Inhalation at high concentrations may cause CNS depression and asphixiation.
Chronic: May cause liver and kidney damage. May cause methemoglobinemia, which is characterized by chocolate-brown colored blood, headache, weakness, dizziness, breath shortness, cyanosis (bluish skin due to deficient oxygenation of blood), rapid heart rate, unconsciousness and possible death. Effects may be delayed.

4. First Aid Measures

Eyes: Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).
Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.
Ingestion: Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting and seek IMMEDIATE MEDICAL ADVICE.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.
Notes to Physician: For methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobin concentration in the blood.
Antidote: Methylene blue, alone or in combination with oxygen is indicated as a treatment in nitrite induced methemoglobinemia.

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5. Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Combustible liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Contact with metals may evolve flammable hydrogen gas. Vapors may form an explosive mixture with air. Containers may explode when heated. Contact with water forms corrosive vapors. Runoff from fire control or dilution water may cause pollution.
Extinguishing Media: Do NOT get water inside containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.
Flash Point: 88 deg C (190.40 deg F)
Autoignition Temperature: Not applicable.
Explosion Limits, Lower: Not available.
Upper: Not available.
NFPA Rating: (estimated) Health: 3; Flammability: 2; Instability: 0

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6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Place under an inert atmosphere.

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7. Handling and Storage

Handling: Wash thoroughly after handling. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Handle under an inert atmosphere. Store protected from air. Use only in a chemical fume hood. Discard contaminated shoes. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.
Storage: Keep away from sources of ignition. Keep container closed when not in use. Corrosives area. Do not expose to air. Store under an inert atmosphere.

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8. Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Chlorobenzylamine	none listed	none listed	none listed

OSHA Vacated PELs: 2-Chlorobenzylamine: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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9. Physical and Chemical Properties

Physical State: Liquid
Appearance: clear yellow
Odor: Not available.
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: 4.8
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: 103 - 104 deg C @ 1mmHg
Freezing/Melting Point: Not available.
Decomposition Temperature: Not available.
Solubility: immiscible with water
Specific Gravity/Density:1.1730g/cm3
Molecular Formula: ClC6H4CH2NH2
Molecular Weight:141.60

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10. Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions. Air sensitive.
Conditions to Avoid: Incompatible materials, ignition sources, exposure to air, excess heat, strong oxidants.
Incompatibilities with Other Materials: Air, acids, acid anhydrides, acid chlorides, carbon dioxide, oxidizing agents.
Hazardous Decomposition Products: Hydrogen chloride, nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.
Hazardous Polymerization: Has not been reported.

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11. Toxicological Information

RTECS#:
CAS# 89-97-4 unlisted.
LD50/LC50:
Not available.

Carcinogenicity:
CAS# 89-97-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found
Teratogenicity: No information found
Reproductive Effects: No information found
Mutagenicity: No information found
Neurotoxicity: No information found

Other Studies:

12. Ecological Information

No information available.

13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

14. Transport Information

	US DOT	Canada TDG
Shipping Name:	AMINES, LIQUID, CORROSIVE, N.O.S.	No information available.
Hazard Class:	8	
UN Number:	UN2735	
Packing Group:	III	

15. Regulatory Information

US FEDERAL

TSCA
CAS# 89-97-4 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
Section 313 No chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE
CAS# 89-97-4 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives
Hazard Symbols:
C
Risk Phrases:
R 34 Causes burns.

Safety Phrases:
S 25 Avoid contact with eyes.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face pr
otection.
S 45 In case of accident or if you feel unwell, seek medical advice
immediately (show the label where possible).

WGK (Water Danger/Protection)
CAS# 89-97-4: No information available.
Canada - DSL/NDSL
CAS# 89-97-4 is listed on Canada's NDSL List.
Canada - WHMIS
This product has a WHMIS classification of E, B3.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
Canadian Ingredient Disclosure List

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16. Other Information

Product Use:
Laboratory Reagent.
Revision Information:
Jan. 2008.
Disclaimer:
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