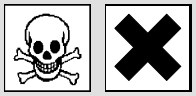
TCI AMERICA

Material Safety Data Sheet

HAZARD WARNINGS	RISK PHRASES	PROTECTIVE CLOTHING
	**Toxic compound, do not ingest or inhale. Avoid all contact with this material.** **Irritating to skin, eyes, and the respiratory system.** **Readily absorbed through skin.**	

Section I. Chemical Product and Company Identification

Chemical Name: **2-Phenylethyl Alcohol**

Catalog Number	P0084
Synonym	Benzyl Carbinol
Chemical Formula	$C_8H_{10}O$
CAS Number	60-12-8

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-Phenylethyl Alcohol	60-12-8	Min. 98.0 (GC)	Not available.	Rat LD_{50} (oral) 1790 mg/kg Rabbit LD_{50} (dermal) 760 uL/kg Rat LD_{50} (inhalation) >500 mg/m^3

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.
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.
Readily absorbed through skin.
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.
Rat TDLo Oral 43 mg/kg, female 6-15 days of pregnancy
TOXIC Effects:
Specific Developmental Abnormalities - Eye, ear
Specific Developmental Abnormalities - Craniofacial
Effects on Newborn - Growth statistics
Rat TDLo Oral 430 mg/kg, female 6-15 days of pregnancy
TOXIC Effects:
Specific Developmental Abnormalities - Eye, ear
Specific Developmental Abnormalities - Musculoskeletal system
Specific Developmental Abnormalites - Urogenital system
Rat TDLo Skin 14 gm/kg, female 6-15 days of pregnancy
TOXIC Effects:
Effects on Fertility - Post-implanttion mortality
Effects on Embryo or Fetus - Fetotoxicity
Specific Developmental Abnormalities - Other developmental abnormalities

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.

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Section V. Fire and Explosion Data

Flammability	May be combustible at high temperature.	Auto-Ignition	Not available.
Flash Points	102°C (215.6°F).	Flammable Limits	Not available.
Combustion Products	These products are toxic carbon oxides (CO, CO_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	Toxic material. Irritating material. Material is readily absorbed through skin. 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	TOXIC. IRRITANT. READILY ABSORBED THROUGH SKIN. 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 gas/fumes/ vapor/spray. 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	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	Splash goggles. 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	Not available.

Section IX. Physical and Chemical Properties

Physical state @ 20°C	Liquid. (Clear, colorless.)	Solubility	One part is clearly soluble in 1 part of 50% alcohol. Miscible with alcohol, ether, chloroform. Soluble in glycerol. Very soluble in propyleneglycol. Very slightly soluble in water.
Specific Gravity	1.02 (water=1)		
Molecular Weight	122.16	Partition Coefficient	Log P_{ow}: 1.4
Boiling Point	101 to 103°C (213.8 to 217.4°F) @ 10 mmHg	Vapor Pressure	8 Pa (@ 20°C)
Melting Point	-27°C (-16.6°F)	Vapor Density	4.2 (Air = 1)
Refractive Index	1.531 - 1.534	Volatility	Not available.
Critical Temperature	Not available.	Odor	Slight Fragrant Odor
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.
Incompatibilities	Reactive with strong oxidizing agents, strong acids.

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Section XI. Toxicological Information

RTECS Number	SG7175000
Routes of Exposure	Eye Contact. Ingestion. Inhalation.
Toxicity Data	Rat LD_{50} (oral) 1790 mg/kg Rabbit LD_{50} (dermal) 760 uL/kg Rat LD_{50} (inhalation) >500 mg/m^3
Chronic Toxic Effects	**CARCINOGENIC EFFECTS** : Not available. **MUTAGENIC EFFECTS** : Not available. **TERATOGENIC EFFECTS** : Not available. **DEVELOPMENTAL TOXICITY**: Reproductive Effects. Rat TDLo Oral 43 mg/kg, female 6-15 days of pregnancy TOXIC Effects: Specific Developmental Abnormalities - Eye, ear Specific Developmental Abnormalities - Craniofacial Effects on Newborn - Growth statistics Rat TDLo Oral 430 mg/kg, female 6-15 days of pregnancy TOXIC Effects: Specific Developmental Abnormalities - Eye, ear Specific Developmental Abnormalities - Musculoskeletal system Specific Developmental Abnormalites - Urogenital system Rat TDLo Skin 14 gm/kg, female 6-15 days of pregnancy TOXIC Effects: Effects on Fertility - Post-implanttion mortality Effects on Embryo or Fetus - Fetotoxicity Specific Developmental Abnormalities - Other developmental abnormalities
Acute Toxic Effects	Toxic if ingested or inhaled. Avoid prolonged contact with this material. Overexposure may result in serious illness 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. Readily absorbed through skin. 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-Phenylethanol may be released to the environment during its manufacture, transport, disposal, and use as an intermediate in organic synthesis, a fragrance in perfumes, soaps, and other products, a flavoring agent, antibacterial, and preservative. It is a natural product being found in many plants and foods. 2-Phenylethanol has a low adsorptivity to soil and if released on soil, may leach. Limited data indicate that it is readily biodegradable in screening tests and may therefore biodegrade in soil. If released in water, little 2-phenylethanol will be lost by volatilization as its volatilization half-life in a model river is estimated to be 45 days. As in soil, it would be expected to biodegrade. Bioconcentration in aquatic organisms should not be important. In the atmosphere, 2-phenylethanol will react with photochemically-produced hydroxyl radicals resulting in an estimated half-life of 1.6 days. It is fairly soluble in water and therefore may be washed out of the atmosphere by rain. Workplace exposure to a 2-phenylethanol may be by inhalation or dermal contact. in many plants and foods and used extensively as a fragrance and therefore the general population may be exposed to 2-phenylethanol in food and in consumer products such as perfumes, soaps, and detergents.

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	UN2810
Proper Shipping Name	Toxic liquid, organic, n.o.s.
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)	200-456-2
EEC Risk Statements	R23/24/25- Toxic by inhalation, in contact with skin and if swallowed. R36/37/38- Irritating to eyes, respiratory system and skin.
Japanese Regulatory Data	ENCS No. 3-1032

Section XVI. Other Information

Version 1.0
Validated on 3/27/2007.
Printed 3/27/2007.

Notice to Reader

TCI laboratory chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our MSDS sheets are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated MSDS sheets for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.