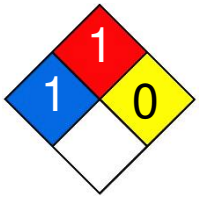

Revision 3

1. IDENTIFICATION

Product Name	**Benzyl alcohol**
Other Names	phenylmethanol; benzenemethanol; phenylmethanol; phenylcarbinol
Uses	For Laboratory, Research or Manufacturing Use.
Chemical Family	No Data Available
Chemical Formula	$C_6H_5CH_2OH$
Chemical Name	No Data Available
Product Description	No Data Available
Company	**Arman sina.co**
Contact Information	info@armansina.com **www.armansina.com**

2. HAZARD IDENTIFICATION

Hazard Categories

Acute toxicity (Oral)	Category 4
Acute toxicity (Inhalation - vapor)	Category 4
Eye irritation	Category 2A

Signal Word Warning

Hazard Statements

Harmful if swallowed or if inhaled
Causes serious eye irritation.

Precautionary Statements

Prevention

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/ eye protection/ face protection.

Response

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTER/doctor if you feel unwell.
Rinse mouth.
If eye irritation persists: Get medical advice/ attention..

Disposal:
Dispose of contents/ container to an approved waste disposal plant.

if present and easy to do. Continue rinsing.

Symbol

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Benzyl alcohol	$C_6H_5CH_2OH$	100-51-6	98 - 100%

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed Rinse mouth. Call a POISON CENTER/doctor if you feel unwell

Eye Flush thoroughly with water. If irritation occurs, get medical assistance.

Skin Wash skin thoroughly with soap and water. Call a POISON CENTER/doctor if you feel unwell. Wash contaminated clothing before reuse.

Inhaled Move to fresh air. Call a POISON CENTER/doctor if you feel unwell.

Advice to Doctor Treat symptomatically. Symptoms may be delayed

5. FIRE FIGHTING MEASURES

General Measures	No unusual fire or explosion hazards noted.
Flammability Conditions	FLAMMABLE LIQUID & VAPOUR: May be ignited by heat, sparks or flame.
Extinguishing Media	Extinguish with foam, carbon dioxide or dry powder. Do not use water jet as an extinguisher, as this will spread the fire.
Fire and Explosion Hazard	During fire, gases hazardous to health may be formed.
Hazardous Products of Combustion	No Data Available
Special Fire Fighting Instructions	Use water spray to keep fire-exposed containers cool. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out.
Personal Protective Equipment	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Flash Point	101°C
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Stop the flow of material, if this is without risk. Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.
Clean Up Procedures Containment	Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal
Decontamination	Neutralise residues with lime or soda ash. Wash area and prevent runoff into drains.
Environmental Precautionary Measures	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.
Evacuation Criteria	No Data Available
Personal Precautionary Measures	See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

7. HANDLING AND STORAGE

Handling	Avoid contact with eyes, skin, and clothing. Avoid breathing substance. Do not taste or swallow. Use personal protective equipment as required. Wash hands thoroughly after handling.
Storage	Keep away from food, drink and animal feeding stuffs. Store in tightly closed original container in a dry, cool and well-ventilated place.
Container	Keep only in the original container or packaging as supplied and/or recommended by the manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

Exposure Limits

Benzyl alcohol (10 ppm)	100-51-6 2012	TWA : Time weighted average WEEL:US. OARS. WEELs Workplace Environmental Exposure Level Guide	44.20 mg/m3

Biological Limits

Engineering Measures

Use with local exhaust ventilation.

Personal Protection Equipment

Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.
Avoid inhalation of vapour or mist.
Eye protection :Safety goggles
Hand protection : Impervious butyl rubber gloves
Gloves must be inspected prior to use.
Replace when worn.
Skin and body protection : Protective suit
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Special Hazards Precaustions

No Data Available

Work Hygienic Practices

Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear liquid
Odour	Mild, Aromatic
Colour	Colourless
pH	No Data Available
Vapour Pressure	0.01253 kPa (25 °C) 0.67 hPa (50 °C)
Relative Vapour Density	2.6 AIR=1
Boiling Point	205.3 - 205.7 ° C

Melting Point	-15.4 - -15.2 °C	
Freezing Point	-15.4 - -15.2 °C	
Solubility	**Solubility in water:** 40 g/l (25 °C)	**Solubility (other):** acetone: Soluble Ethanol: Soluble ether: Soluble
Specific Gravity	No Data Available	
Flash Point	100.4 °C (Closed Cup)	
Auto Ignition Temp	436 °C	
Evaporation Rate	No data available	
Bulk Density	No Data Available	
Corrosion Rate	No Data Available	
Decomposition Temperature	No Data Available	
Density	1.05 g/ml (20 ° C) 1.03 g/ml (40 ° C)	
Specific Heat	No Data Available	
Molecular Weight	108.14 g/mol (C7H8O)	
Net Propellant Weight	No Data Available	
Octanol Water Coefficient	1.10	
Particle Size	No Data Available	
Partition Coefficient	No Data Available	
Saturated Vapour Concentration	No Data Available	
Vapour Temperature	No Data Available	
Viscosity	No Data Available	
Volatile Percent	No Data Available	
VOC Volume	No Data Available	
Additional Characteristics	No information available.	
Potential for Dust Explosion	Not applicable.	
Fast or Intensely Burning Characteristics	No Data Available	
Flame Propagation or Burning Rate of Solid Materials	No information available.	
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.	
Properties That May Initiate or Contribute to Fire Intensity	No data available	
Reactions That Release Gases or Vapours	No Data Available	
Release of Invisible Flammable Vapours and Gases	No Data Available	

10. STABILITY AND REACTIVITY

General Information	No dangerous reaction known under conditions of normal use.
Chemical Stability	Material is stable under normal conditions.
Conditions to Avoid	Heat, sparks, flames. Contact with incompatible materials. Keep away from sources of ignition - No smoking.
Materials to Avoid	Acids. Oxidizing agents. Aluminum.
Hazardous Decomposition Products	Thermal decomposition may release oxides of carbon.
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information

Information on likely routes of exposure
Inhalation: Harmful if inhaled.
Skin Contact: Prolonged skin contact may cause temporary irritation. May be harmful in contact with skin.
Eye contact: May cause temporary eye irritation.
Harmful if swallowed.

Acute

Information on toxicological effects
Acute toxicity
Oral Product: LD 50 (Rat): 1,230 - 3,100 mg/kg NOAEL (Rat): 1,045 mg/kg
Dermal Product: LD 50 (Rabbit) 2,000 mg/kg
Inhalation Product: LC 50 (Rat, 4 h) > 4,178 mg/l NOAEL (Rat, 4 h): 3,297 mg/l

Carcinogen Category

This substance has no evidence of carcinogenic properties

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute hazards to the aquatic environment:
Fish Product: No data available.
Specified substance(s): Benzyl alcohol LC 50 (Bluegill (Lepomis macrochirus), 96 h): 10 - 15 mg/l
LC 50 (Fathead minnow (Pimephales promelas), 96 h): 460 mg/l
LC 50 (Oryzias latipes, 96 h): > 100 mg/l

Persistence/Degradability

No Data Available

Mobility

The product is partly soluble in water. May spread in the aquatic environment.

Environmental Fate

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Bioaccumulation Potential

No data available on bioaccumulation.

Environmental Impact

Specified substance(s):
Benzyl alcohol
EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): 770 mg/l
NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): 310 mg/l

13. DISPOSAL CONSIDERATIONS

General Information

Since emptied containers retain product residue, follow label warnings even after container is emptied.

Special Precautions for Land Fill

Discharge, treatment, or disposal may be subject to national, state, or local laws.

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name	Benzyl alcohol
Class	9
Subsidiary Risk(s)	No Data Available
EPG	No Data Available
UN Number	3334
Hazchem	No Data Available
Pack Group	III
Special Provision	No Data Available

Sea Transport

Proper Shipping Name	Benzyl alcohol
Class	9
Subsidiary Risk(s)	No Data Available
UN Number	3334
Hazchem	No Data Available
Pack Group	III
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No Data Available

Air Transport

Proper Shipping Name	Benzyl alcohol
Class	9
Subsidiary Risk(s)	No Data Available
UN Number	3334
Hazchem	No Data Available
Pack Group	III
Special Provision	No Data Available

15. OTHER INFORMATION

Revision 3

Key/Legend

< Less Than
> Greater Than
atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)
cm² Square Centimetres
CO2 Carbon Dioxide
COD Chemical Oxygen Demand
deg C (° C) Degrees Celcius

deg F (° F) Degrees Farenheit
g Grams
g/cm³ Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH2O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight