SAFETY DATA SHEET

According to US Regulation 29 CFR 1910.1200 (HazCom 2012)

1. Identification

Product identifier: Benzyl Alcohol

Other means of identification

Product No.: 1403, 1816, 9039, 9040, 9041, 9050, 9421, BS06, 71083

Recommended restrictions

Recommended use: For Laboratory, Research or Manufacturing Use.
Restrictions on use: Not determined.

Details of the supplier of the safety data sheet

Company Name:	Avantor Performance Materials, LLC
Address:	100 Matsonford Rd, Suite 200 Radnor, PA 19087
Telephone:	Customer Service: 855-282-6867
Contact Person:	Product Information Compliance
E-mail:	info@avantormaterials.com

Emergency telephone number:

CHEMTREC: 1-800-424-9300 within US and Canada (24 hrs/day, 7 days/week)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Oral)	Category 4
Acute toxicity (Inhalation - vapor)	Category 4

Unknown toxicity - Health

Acute toxicity, inhalation, vapor	100 %

Label Elements

Hazard Symbol:

Signal Word: Warning

Hazard Statement: Harmful if swallowed.
Harmful if inhaled.

Precautionary Statements

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

Response: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Substances

Chemical Identity	CAS number	Content in percent (%)*
Benzyl alcohol	100-51-6	99 - 100%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

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

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

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

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

Most important symptoms/effects, acute and delayed

Symptoms: Harmful if swallowed. Harmful if inhaled.

Hazards: None known.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Extinguish with foam, carbon dioxide or dry powder. Do not use water jet as an extinguisher, as this will spread the fire.
Unsuitable extinguishing media:	None known.
Specific hazards arising from the chemical:	During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:	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.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	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.
Methods and material for containment and cleaning up:	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.
Notification Procedures:	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.
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe 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.
Conditions for safe storage, including any incompatibilities:	Keep away from food, drink and animal feeding stuffs. Store in tightly closed original container in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate Engineering Controls	No data available.

Individual protection measures, such as personal protective equipment

General information:	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.
Eye/face protection:	Wear safety glasses with side shields (or goggles).
Skin Protection	
Hand Protection:	Chemical resistant gloves
Other:	Wear suitable protective clothing.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator.
Hygiene measures:	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

Appearance

Physical state:	Liquid
Form:	Liquid
Color:	Colorless
Odor:	Mild, Aromatic
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	-15.4 - -15.2 °C
Initial boiling point and boiling range:	205.3 - 205.7 °C
Flash Point:	100.4 °C (Closed Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	0.01253 kPa (25 °C) 0.67 hPa (50 °C)
Vapor density:	3.72 (Air=1)
Density:	1.05 g/ml (20 °C) 1.03 g/ml (40 °C)
Relative density:	1.05 (20 °C)
Solubility(ies)	
Solubility in water:	40 g/l (25 °C)
Solubility (other):	acetone: Soluble ethanol: Soluble ether: Soluble
Partition coefficient (n-octanol/water):	1.10
Auto-ignition temperature:	436 °C
Decomposition temperature:	No data available.

Viscosity: No data available.

Other information

Liquid conductivity: 18 µS/cm (25 °C)

Molecular weight: 108.14 g/mol (C7H8O)

10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Heat, sparks, flames. Contact with incompatible materials. Keep away from sources of ignition - No smoking.

Incompatible Materials: Acids. Oxidizing agents. Aluminum.

Hazardous Decomposition Products: Thermal decomposition may release oxides of carbon.

11. Toxicological 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.

Ingestion: Harmful if swallowed.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

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

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: Prolonged skin contact may cause temporary irritation.

Serious Eye Damage/Eye Irritation

Product: May cause temporary eye irritation.

Respiratory or Skin Sensitization
Product: Not a skin nor a respiratory sensitizer.

Carcinogenicity
Product: This substance has no evidence of carcinogenic properties.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):
No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No mutagenic components identified

In vivo
Product: No mutagenic components identified

Reproductive toxicity
Product: No components toxic to reproduction

Specific Target Organ Toxicity - Single Exposure
Product: None known.

Specific Target Organ Toxicity - Repeated Exposure
Product: None known.

Aspiration Hazard
Product: Not classified

Other effects: None known.

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

Aquatic Invertebrates
Product: No data available.

Specified substance(s):

Benzyl alcohol	EC 50 (Water Flea, 48 h): 230 mg/l

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.

Aquatic Invertebrates

Product:	No data available.

Toxicity to Aquatic Plants

Product:	No data available.

Specified substance(s):

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

Persistence and Degradability

Biodegradation

Product:	There are no data on the degradability of this product.

BOD/COD Ratio

Product:	No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

Product:	Log Kow: 1.10

Mobility in soil:	The product is partly soluble in water. May spread in the aquatic environment.
Other adverse effects:	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.

13. Disposal considerations

Disposal instructions:	Discharge, treatment, or disposal may be subject to national, state, or local laws.
Contaminated Packaging:	Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):
None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Acute toxicity (any route of exposure)

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification
None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Benzyl alcohol	10000 lbs.

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):
None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act
No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

Chemical Identity
Benzyl alcohol

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
Benzyl alcohol

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

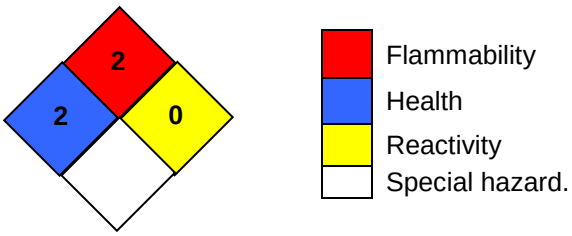
Not applicable

Inventory Status:

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Mexico INSQ:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory

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

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date:	04-28-2020
Revision Information:	Not relevant.
Version #:	1.5
Source of information:	Sources of information used in preparing this SDS included one or more of the following: results from in house or supplier toxicology studies, information from the Toxicology Data Network (TOXNET), European Chemical Agency (ECHA) substance dossiers, IARC Monographs, US National Toxicology Program data, the Agency for Toxic Substances and Disease Registry, other manufacturer's SDSs and other sources, as appropriate.
Further Information:	No data available.

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