

SAFETY DATA SHEET

1. Identification

Product identifier: BAKERBOND™ PROchievA™ Resin

Other means of identification

Product No.: 7899

Recommended use and restriction on use

Recommended use: Antibody purification. For drug manufacturing or R&D use only. Not on TSCA Inventory. Excluded from TSCA or exempt from premanufacture notice.

Restrictions on use: Not determined.

Details of the supplier of the safety data sheet

	Avantor Performance Materials, LLC
	100 Matsonford Rd, Suite 200
	Radnor, PA 19087
Telephone:	
	Customer Service: 855-282-6867
Fax:	
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 identification

Hazard Classification

Not classified

Label Elements

Hazard Symbol:	No symbol
Signal Word:	No signal word.
Hazard Statement:	Not applicable
Precautionary Statements	Not applicable

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	Content in percent (%)*
Benzyl alcohol		100-51-6	1,9 - 2,1%
Ethanol	, Ethyl alcohol	64-17-5	1,8 - 2,2%

* 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. Get medical attention if symptoms occur. Never give liquid to an unconscious person.
Inhalation:	Move to fresh air.
Skin Contact:	Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.
Eye contact:	If eye irritation persists: Get medical advice/attention. Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.

Most important symptoms/effects, acute and delayed

Symptoms:	May cause irritation to skin, eyes and respiratory tract.
Hazards:	No information about adverse effects due to exposure.

Indication of immediate medical attention and special treatment needed

Treatment:	Treat symptomatically. Symptoms may be delayed.
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5. Fire-fighting measures

General Fire Hazards:	No unusual fire or explosion hazards noted.
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Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	No data available.

Specific hazards arising from the chemical:	None known.
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Special protective equipment and precautions for firefighters

Special fire fighting procedures:	In case of fire and/or explosion do not breathe fumes.
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:	Keep unauthorized personnel away.
Methods and material for containment and cleaning up:	Sweep up and place in a clearly labeled container for chemical waste.
Notification Procedures:	Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Dike for later disposal.
Environmental Precautions:	Do not contaminate water sources or sewer. Avoid release to the environment.

7. Handling and storage

Precautions for safe handling:	Use personal protective equipment as required. Wear protective gloves/protective clothing/eye protection/face protection. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. See Section 8 of the SDS for Personal Protective Equipment. Do not eat, drink or smoke when using the product. Wash at the end of each work shift and before eating, smoking and using the toilet.
Conditions for safe storage, including any incompatibilities:	Storage Temperature: Between 2 and 8 C. Keep container tightly closed.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Ethanol	TWA	1.000 ppm 1.880 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Ethanol	STEL	1.000 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Ethanol	STEL	1.000 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
Ethanol	STEL	1.000 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Ethanol	8 HR ACL	1.000 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	1.250 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Ethanol	TWA	1.000 ppm 1.880 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Ethanol	STEL	1.000 ppm	US. ACGIH Threshold Limit Values (2011)

Appropriate Engineering Controls	No special requirements under ordinary conditions of use and with adequate ventilation.
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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. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc.
Eye/face protection:	Use personal protective equipment as required.
Skin Protection	
Hand Protection:	Chemical resistant gloves
Other:	Wear suitable protective clothing.
Respiratory Protection:	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Hygiene measures:	Do not eat, drink or smoke when using the product. Wash hands before breaks and immediately after handling the product.

<h3>9. Physical and chemical properties</h3>
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Appearance

Physical state:	Solid
Form:	Gel
Color:	Colorless
Odor:	No data available.
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	No data available.
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:	No data available.
Vapor density:	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

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.
Incompatible Materials:	Strong oxidizing agents.
Hazardous Decomposition Products:	Oxides of Carbon.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No adverse effects are expected.
Skin Contact:	Prolonged skin contact may cause temporary irritation.
Eye contact:	May cause temporary eye irritation.
Ingestion:	No adverse effects due to ingestion are expected.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	ATEmix (Rat): 26.670,14 mg/kg
Dermal	
Product:	ATEmix (Rabbit): 51.619,05 mg/kg
Inhalation	
Product:	No data available.
Specified substance(s):	
Benzyl alcohol	LC 50 (Rat): > 4.178 mg/l NOAEL (Rat): 3.297 mg/l
Ethanol	LC 50 (Rat): 116,9 - 133,8 mg/l

Repeated dose toxicity

Product:	None known.
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Skin Corrosion/Irritation

Product:	Prolonged skin contact may cause temporary irritation.
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Serious Eye Damage/Eye Irritation

Product:	May cause temporary eye irritation.
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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

ACGIH Carcinogen List:

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

Ethanol
LC 50 (Rainbow trout,donaldson trout (*Oncorhynchus mykiss*), 96 h): 11.850 - 20.100 mg/l
LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 13.480 - 29.400 mg/l
LC 50 (Carp (*Leuciscus idus melanotus*), 48 h): 8.140 mg/l
EC 50 (Fathead minnow (*Pimephales promelas*); Rainbow trout (*Oncorhynchus mykiss*), 96 h): 12.900 - 28.900 mg/l
EC 50 (Rainbow trout,donaldson trout (*Oncorhynchus mykiss*), 96 h): 13.000 mg/l

Aquatic Invertebrates

Product:	No data available.
Specified substance(s):	
Benzyl alcohol	EC 50 (Water Flea, 48 h): 230 mg/l
Ethanol	EC 50 (Water flea (Daphnia obtusa), 48 h): 10.100 - 22.200 mg/l LC 50 (Water flea (Daphnia magna), 48 h): 7.560 - 15.386 mg/l LC 50 (Ceriodaphnia dubia, 48 h): 5.012 mg/l EC 50 (Water flea (Daphnia magna), 48 h): > 10.000 mg/l

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
Specified substance(s):	
Ethanol	EC 50 (Oryzias latipes, 200 h): 9.164 - 14.536 mg/l NOAEL (Oryzias latipes, 200 h): 7.900 - 15.800 mg/l LOAEL (Oryzias latipes, 200 h): 7.900 - 39.505 mg/l

Aquatic Invertebrates

Product:	No data available.
Specified substance(s):	
Benzyl alcohol	NOAEL (Daphnia magna, 21 d): 51 mg/l EC 50 (Daphnia magna, 21 d): 66 mg/l
Ethanol	NOAEL (Daphnia magna, 21 d): > 10 mg/l LOAEL (Biomphalaria tenagophila, 8 Weeks): 19,8 mg/l NOAEL (Ceriodaphnia dubia, 10 d): 2 - 9,6 mg/l NOAEL (Biomphalaria tenagophila, 8 Weeks): 19,8 mg/l LC 50 (Ceriodaphnia dubia, 10 d): 1.806 mg/l

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.
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BOD/COD Ratio

Product:	Not determined.
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Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	Not known.
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Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.
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Specified substance(s):

Benzyl alcohol	Log Kow: 1,10
Ethanol	Log Kow: -0,31

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Benzyl alcohol No data available.
Ethanol No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws. Do not allow to enter drains, sewers or watercourses.

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

14. Transport information

TDG
Not regulated.

IMDG
Not regulated.

IATA
Not regulated.

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

15. Regulatory information

Canada Federal Regulations

List of Toxic Substances (CEPA, Schedule 1)
Not Regulated

Export Control List (CEPA 1999, Schedule 3)
Not Regulated

National Pollutant Release Inventory (NPRI)

Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements
NPRI PT5 Ethanol

Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)
NPRI Not Regulated

Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements
NPRI PT5 Ethanol

Greenhouse Gases
Not Regulated

Controlled Drugs and Substances Act

CA CDSI Not Regulated
CA CDSII Not Regulated
CA CDSIII Not Regulated

CA CDSIV	Not Regulated
CA CDSV	Not Regulated
CA CDSVII	Not Regulated
CA CDSVIII	Not Regulated

Precursor Control Regulations

Not Regulated

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

Inventory Status:

Australia AICS:	Not in compliance with the inventory.
Canada DSL Inventory List:	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
Japan ISHL Listing:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Mexico INSQ:	Not in compliance with the inventory.
New Zealand Inventory of Chemicals:	Not in compliance with the inventory.
Philippines PICCS:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	Not in compliance with the inventory.
US TSCA Inventory:	For drug manufacturing or R&D use only. Not on TSCA Inventory. Excluded from TSCA or exempt from premanufacture notice.
EINECS, ELINCS or NLP:	Not in compliance with the inventory.

16. Other information

Revision Date: 16.07.2020

Version #: 1.7

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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