

SAFETY DATA SHEET

1. Identification

Product identifier: BAKER PRS-2000™ Positive Resist

Other means of identification

Product No.: 6052, 6410, 640K, 6400

Recommended use and restriction on use

Recommended use: Not available.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name: Avantor Performance Materials, Inc.
Address: 3477 Corporate Parkway, Suite 200
Center Valley, PA 18034

Telephone: Customer Service: 855-282-6867

Fax:
Contact Person: Environmental Health & Safety
e-mail: info@avantormaterials.com

Emergency telephone number:

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

2. Hazard(s) identification

Hazard classification

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity - single exposure	Category 3
Specific target organ toxicity - repeated exposure	Category 2
Acute toxicity (Oral)	Category 5

Label elements

Hazard symbol:



Signal word:

Danger

Hazard statement: May be harmful if swallowed.
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May damage fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response: Immediately call a POISON CENTER/doctor. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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.

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

3. Composition/information on ingredients

Mixtures

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
1-METHYL-2-PYRROLIDONE		872-50-4	40 - 60%
TETRAHYDROTHIOPHEN E 1,1-DIOXIDE		126-33-0	20 - 40%
2-(2-ETHOXYETHOXY)ETHAN OL		111-90-0	10 - 20%
1-AMINO-2-PROPANOL		78-96-6	5 - 15%
TETRAETHYLENE GLYCOL		112-60-7	2.5 - 10%

* 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:	Call a POISON CENTER or doctor/physician if you feel unwell. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Inhalation:	Move to fresh air. Call a physician or poison control center immediately. If breathing is difficult, give oxygen. If breathing stops, provide artificial respiration.
Skin contact:	Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. In case of irritation from airborne exposure, move to fresh air. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Symptoms: Causes serious eye damage.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures

General fire hazards: In case of fire and/or explosion do not breathe fumes.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Foam, carbon dioxide or dry powder.

Unsuitable extinguishing media: Water may be ineffective in fighting the fire.

Specific hazards arising from the chemical: Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. 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: Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures:	Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. 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. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling:	Use personal protective equipment as required. Do not get in eyes, on skin, on clothing. Avoid breathing mists or vapors. Do not taste or swallow. Do not eat, drink or smoke when using the product. Use only with adequate ventilation. Wash hands thoroughly after handling. See Section 8 of the MSDS for Personal Protective Equipment.
Conditions for safe storage, including any incompatibilities:	Keep away from food, drink and animal feeding stuffs. Keep containers tightly closed. Keep in a cool, well-ventilated place. Store in a dry 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:	Chemical goggles and face shield are recommended.
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:	Pale yellow
Odor:	Amine-like odor

Odor threshold:	No data available.
pH:	11.2 5% aqueous solution
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	180 °C
Flash Point:	96 °C
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:	0.03 kPa
Vapor density:	No data available.
Relative density:	1.07 (20 °C)
Solubility(ies)	
Solubility in water:	Completely Soluble
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, sparks, flames. Contact with incompatible materials.
Incompatible materials:	Strong oxidizing agents. Acids. Alkali metals.
Hazardous decomposition products:	Oxides of Carbon. Oxides of sulfur. Nitrogen Oxides

11. Toxicological information

Information on likely routes of exposure

Ingestion:	May be harmful if swallowed.
Inhalation:	Spray mist may irritate the respiratory system.
Skin contact:	Causes skin irritation.
Eye contact:	Causes serious eye damage.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	ATEmix (Rat): 2,897 mg/kg

Dermal

Product: ATEmix (Rabbit): 16,040 mg/kg

Inhalation

Product: No data available.

Specified substance(s):

TETRAHYDROTHIOPHE
NE 1,1-DIOXIDE LC 50 (Rat, 4 h): > 12 mg/l

Repeated dose toxicity

Product: No data available.

Skin corrosion/irritation

Product: Causes skin irritation.

Serious eye damage/eye irritation

Product: Causes serious eye damage.

Respiratory or skin sensitization

Product: Not a skin 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: May damage fertility or the unborn child.

Specific target organ toxicity - single exposure

Product: Narcotic effect. Respiratory tract irritation.

Specific target organ toxicity - repeated exposure

Product: Kidneys. Central nervous system.

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):	
TETRAHYDROTHIOPHE NE 1,1-DIOXIDE	LC 50 (Goldfish (Carassius auratus), 24 h): 140 mg/l Mortality
2-(2- ETHOXYETHOXY)ETHA NOL	LC 50 (Bluegill (Lepomis macrochirus), 96 h): 19,100 - 23,900 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 96 h): 7,910 - 11,800 mg/l Mortality
1-AMINO-2-PROPANOL	LC 50 (Goldfish (Carassius auratus), 96 h): 210 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 96 h): 2,390 - 2,650 mg/l Mortality

Aquatic invertebrates

Product:	No data available.
Specified substance(s):	
2-(2- ETHOXYETHOXY)ETHA NOL	LC 50 (Brine shrimp (Artemia salina), 24 h): > 10,000 mg/l Mortality LC 50 (Water flea (Daphnia magna), 48 h): 2,120 - 5,280 mg/l Mortality LC 50 (Crayfish (Orconectes immunis), 96 h): 29,100 - 41,400 mg/l Mortality
TETRAETHYLENE GLYCOL	LC 50 (Brine shrimp (Artemia salina), 24 h): > 10,000 mg/l Mortality

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.

Persistence and degradability

Biodegradation

Product: Expected to be readily biodegradable.

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: No data available.

Specified substance(s):

1-METHYL-2-
PYRROLIDONE Log Kow: -0.54

TETRAHYDROTHIOPHE
NE 1,1-DIOXIDE Log Kow: -0.77

2-(2-
ETHOXYETHOXY)ETHA
NOL Log Kow: -0.54

1-AMINO-2-PROPANOL Log Kow: -0.96

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

1-METHYL-2-PYRROLIDONE	No data available.
TETRAHYDROTHIOPHENE 1,1-DIOXIDE	No data available.
2-(2-ETHOXYETHOXY)ETHANOL	No data available.
1-AMINO-2-PROPANOL	No data available.
TETRAETHYLENE GLYCOL	No data available.

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)
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 (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating

SARA 302 Extremely hazardous substance
None present or none present in regulated quantities.

SARA 304 Emergency release notification

Chemical identity	RQ
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2-(2-ETHOXYETHOXY)ETHANOL	
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SARA 311/312 Hazardous chemical

Chemical identity	Threshold Planning Quantity
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1-METHYL-2-PYRROLIDONE	500 lbs
TETRAHYDROTHIOPHE NE 1,1-DIOXIDE	500 lbs
2-(2-ETHOXYETHOXY)ETHAN OL	500 lbs
1-AMINO-2-PROPANOL	500 lbs
TETRAETHYLENE GLYCOL	500 lbs

SARA 313 (TRI reporting)

Chemical identity	Reporting threshold for other users	Reporting threshold for manufacturing and processing
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1-METHYL-2-PYRROLIDONE	10000 lbs	25000 lbs.
2-(2-ETHOXYETHOXY)ETHANOL	10000 lbs	25000 lbs.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

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.

US state regulations

US. California Proposition 65

1-METHYL-2-PYRROLIDONE	Developmental toxin.
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US. New Jersey Worker and Community Right-to-Know Act

1-METHYL-2-PYRROLIDONE	Listed
2-(2-ETHOXYETHOXY)ETHANOL	Listed
1-AMINO-2-PROPANOL	Listed

US. Massachusetts RTK - Substance List

1-METHYL-2-PYRROLIDONE	Listed
TETRAHYDROTHIOPHENE 1,1-DIOXIDE	Listed
1-AMINO-2-PROPANOL	Listed

US. Pennsylvania RTK - Hazardous Substances

1-METHYL-2-PYRROLIDONE	Listed
TETRAHYDROTHIOPHENE 1,1-DIOXIDE	Listed
2-(2-ETHOXYETHOXY)ETHANOL	Listed
1-AMINO-2-PROPANOL	Listed

US. Rhode Island RTK

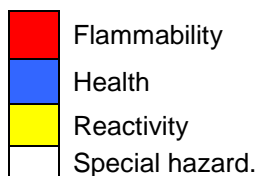
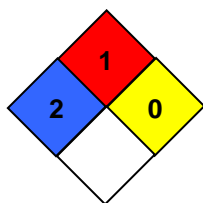
No ingredient regulated by RI Right-to-Know Law present.

Inventory Status:

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Japan Pharmacopoeia Listing:	Not 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

Issue date:	06-18-2014
Revision date:	No data available.
Version #:	1.0
Further information:	No data available.

Disclaimer:

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