



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name REAGENT 2
Version # 01
Revision date 01-20-2010
Product Code P20, P20C, P20R, P100, P100C, P100R
Product use The Platelet PGD Test is a rapid, qualitative immunoassay for the detection of aerobic and anaerobic Gram-positive and Gram-negative bacteria in • leukocyte reduced apheresis platelets (LRAP) as an adjunct quality control test following testing with a bacterial detection device cleared by the FDA for quality control testing of LRAP and • pools of up to six (6) units of leukocyte reduced and non-leukocyte reduced whole blood derived platelets that are pooled within four (4) hours of transfusion as a quality control test.

Manufacturer/Supplier Verax Biomedical Inc.
377 Plantation Street
Worcester , MA 01605
General Information: 1-866 948-3729

Emergency 24 Hour Emergency: 1-760-476-9362

2. Hazards Identification

Physical state Liquid.
Appearance Blue, odorless liquid.
Emergency overview DANGER

May cause eye burns and skin irritation. Harmful if swallowed. Mist or vapor irritating to eyes and respiratory tract.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

- Routes of exposure** Inhalation. Ingestion. Skin contact. Eye contact.
- Eyes** May cause burns. Prolonged contact causes serious eye and tissue damage.
- Skin** May cause skin irritation.
- Inhalation** May cause damage to mucous membranes in nose, throat, lungs and bronchial system.
- Ingestion** May cause burns in mucous membranes, throat, esophagus and stomach.

Target organs Eyes. Skin. Respiratory system. Digestive tract

Chronic effects Prolonged or repeated contact may dry skin and cause dermatitis.

Potential environmental effects Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Sodium hydroxide	1310-73-2	2-<5
Nonylphenol, ethoxylated	9016-45-9	1-5
Polyethylene glycol octylphenol ether	9002-93-1	1-5

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

4. First Aid Measures

First aid procedures

Eye contact Flush thoroughly with water for at least 15 minutes. Get immediate medical assistance. If medical assistance is not immediately available, flush an additional 15 minutes. Make sure to remove any contact lenses from the eyes before rinsing.

Skin contact	Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. Get medical attention immediately. Chemical burns must be treated by a physician.
Inhalation	Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.
Ingestion	Rinse mouth thoroughly with water and give large amounts of milk or water, if person is conscious. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Obtain medical attention and take along this material safety data sheet.
Notes to physician	In case of shortness of breath, give oxygen. Keep victim warm. Symptoms may be delayed.
General advice	In case of shortness of breath, give oxygen. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

5. Fire Fighting Measures

Flammable properties	The product is not flammable. Fire may produce irritating, corrosive and/or toxic gases. May decompose and produce highly flammable hydrogen gas.
Extinguishing media	
Suitable extinguishing media	Use extinguishing agent suitable for type of surrounding fire.
Protection of firefighters	
Protective equipment and precautions for firefighters	Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
Special protective equipment for fire-fighters	Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Specific methods	In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions	Do not breathe vapor. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Stay upwind. Keep out of low areas. Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use Personal Protective Equipment recommended in Section 8 of the MSDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Should not be released into the environment. Large Spills: Absorb spillage with suitable absorbent material. Collect in containers and seal securely. Containers with collected spillage must be properly labeled with correct contents and hazard symbol. Dike far ahead of liquid spill for later disposal. Small Spills: Absorb spill with vermiculite or other inert material. Clean contaminated surface thoroughly. After removal flush contaminated area thoroughly with water. Never return spills to original containers for re-use.

7. Handling and Storage

Handling	Do not breathe vapor. Do not get in eyes, on skin, on clothing. Do not taste or swallow. All handling to take place in well-ventilated area. Use Personal Protective Equipment recommended in section 8 of the MSDS. Handle and open container with care. Wash thoroughly after handling. Observe good industrial hygiene practices.
Storage	Keep in a well-ventilated place. Keep container tightly closed. Keep this material away from food, drink and animal feed. Keep out of the reach of children. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components	Type	Value
Sodium hydroxide (1310-73-2)	TWA	2 mg/m3

U.S. - OSHA

Components	Type	Value
Sodium hydroxide (1310-73-2)	Ceiling	2 mg/m3
	PEL	2 mg/m3

Canada - Alberta

Components	Type	Value
Sodium hydroxide (1310-73-2)	Ceiling	2 mg/m3

Canada - British Columbia

Components	Type	Value
Sodium hydroxide (1310-73-2)	Ceiling	2 mg/m3

Canada - Ontario

Components	Type	Value
Sodium hydroxide (1310-73-2)	Ceiling	2 mg/m3

Canada - Quebec

Components	Type	Value
Sodium hydroxide (1310-73-2)	Ceiling	2 mg/m3

Mexico

Components	Type	Value
Sodium hydroxide (1310-73-2)	Ceiling	2 mg/m3

Engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Eye wash facilities and emergency shower must be available when handling this product.

Personal protective equipment

Eye / face protection Wear goggles/face shield.

Skin protection Wear appropriate chemical resistant clothing to prevent any possibility of skin contact. Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Respiratory protection If enclosed handling is not possible, suitable respiratory protection must be used in applications where mists/aerosols are formed. Full face filter respirator.

General hygiene considerations When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Remove and isolate contaminated clothing and shoes. Handle in accordance with good industrial hygiene and safety practice. Launder contaminated clothing before reuse.

9. Physical & Chemical Properties

Appearance Blue, odorless liquid.

Color Blue.

Odor Odorless.

Odor threshold Not available.

Physical state Liquid.

Form Liquid.

pH 14 @ 20°C (68°F)

Melting point Not available.

Freezing point Not available.

Boiling point Not available.

Flash point	Not available.
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Solubility (water)	Fully miscible
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Density	0.99 g/cm ³ @ 20°C (68°F)

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Corrosive to metals. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids. Organic compounds.
Hazardous decomposition products	Sodium oxides.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects	Corrosive. Prolonged contact causes serious tissue damage. May cause serious chemical burns to the skin. Causes digestive tract burns. May cause burns in mucous membranes, throat, esophagus and stomach. Causes respiratory tract burns. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.
Local effects	Causes burns.
Sensitization	Not a skin sensitizer.
Chronic effects	Prolonged or repeated contact may dry skin and cause dermatitis.
Carcinogenicity	Not classified.
Epidemiology	Not available.
Mutagenicity	Not available.
Neurological effects	Not available.
Reproductive effects	Not available.
Teratogenicity	Not available.

12. Ecological Information

Ecotoxicological data

Components

	Test Results
Sodium hydroxide (1310-73-2)	EC50 Water flea (Ceriodaphnia dubia): 34.59 - 47.13 mg/l 48 Hours LC50 Western mosquitofish (Gambusia affinis): 125 mg/l 96 Hours
Polyethylene glycol octylphenol ether (9002-93-1)	LC50 Bluegill (Lepomis macrochirus): 3 - 3 mg/l 96 Hours
Nonylphenol, ethoxylated (9016-45-9)	EC50 Water flea (Daphnia magna): 12.2 mg/l 48 Hours LC50 Bluegill (Lepomis macrochirus): 1 - 1.8 mg/l 96 Hours

Ecotoxicity	The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Aquatic toxicity	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Persistence and degradability	No data available.
Bioaccumulation / Accumulation	No data available.
Partition coefficient (n-octanol/water)	Not available
Mobility in environmental media	The product is water soluble and may spread in water systems.

13. Disposal Considerations

Disposal instructions	Dispose of this material and its container at hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport Information

Product Specific Note: Tested and determined to NOT meet the definition of a Class 8 material under DOT. Not a hazardous material for shipping purposes. Not a dangerous good.

DOT

Not regulated as dangerous goods.

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

TDG

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA (Superfund) reportable quantity (lbs)

Sodium hydroxide: 1000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Drug Enforcement Agency (DEA) Not controlled

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status Controlled

WHMIS classification E - Corrosive

**Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Hazardous Substances (Director's): Listed substance

Sodium hydroxide (CAS 1310-73-2) Listed.

US - Massachusetts RTK - Substance: Listed substance

Sodium hydroxide (CAS 1310-73-2) Listed.

US - New Jersey RTK - Substances: Listed substance

Sodium hydroxide (CAS 1310-73-2) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Sodium hydroxide (CAS 1310-73-2) Listed.

Mexico regulations This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
 Health: 2*
 Flammability: 0
 Physical hazard: 0

NFPA ratings
 Health: 2
 Flammability: 0
 Instability: 0

Disclaimer NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet (MSDS) and was prepared pursuant to Government regulation(s) that identify specific types of information to be provided. This MSDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. Information provided herein with respect to any hazards that may be associated with the product is not meant to suggest that use of the product in a given application will necessarily result in any exposure or risk to workers or the general public. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product. Purchasers and users assume all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Purchasers and users of the product specifically should advise all of their employees, agents, contractors and customers who will use the product of this MSDS.

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