



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	Reagent 1
Version #	01
Revision date	01-20-2010
CAS #	Mixture
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	Straw or yellow, odorless liquid.
Emergency overview	DANGER! Flammable liquid and vapor. May be fatal or cause blindness if swallowed. Cannot be made nonpoisonous. VAPOR HARMFUL. Harmful if inhaled, absorbed through skin, or swallowed. Causes skin and eye irritation. May cause mild central nervous system effects.
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	Causes eye irritation.
Skin	Harmful if absorbed through skin. Causes skin irritation. Prolonged skin contact may cause dermatitis.
Inhalation	Harmful by inhalation. May cause mild central nervous system effects.
Ingestion	Swallowing or vomiting of the liquid may result in aspiration into the lungs. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness.
Target organs	Eyes. Skin. Respiratory system. Central nervous system.
Chronic effects	In serious cases absorption of methanol in the body may lead to damage to the eyesight. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness. Prolonged skin contact may cause dermatitis.
Signs and symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Potential environmental 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.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Methanol	67-56-1	10-<20
Saponins	8047-15-2	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	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention.
Skin contact	Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. Get medical attention immediately.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician or poison control center immediately.
Ingestion	Rinse mouth thoroughly with water. Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. If vomiting naturally occurs, keep head low (lean forward) so that stomach content doesn't get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Notes to physician

In case of shortness of breath, give oxygen. Keep victim warm. Symptoms may be delayed.

General advice

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties

The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures.

Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	None known.

Protection of firefighters

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Protective equipment and precautions for firefighters Stop leak if you can do so without risk. 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.

6. Accidental Release Measures

Personal precautions

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid inhalation and contact with skin and eyes. DO NOT touch spilled material. See Section 8 of the MSDS for Personal Protective Equipment.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

Methods for containment

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Remove sources of ignition. Absorb spillage with non-combustible, absorbent material. Containers with collected spillage must be properly labeled with correct contents and hazard symbol. Collect and dispose of spillage as indicated in section 13 of the MSDS.

Other information

Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling

Use only with adequate ventilation. Observe good industrial hygiene practices. Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures. Ground container and transfer equipment to eliminate static electric sparks. Do not taste or swallow. Wash thoroughly after handling.

Storage

Follow rules for flammable liquids. Do not store near heat sources or expose to high temperatures. Keep away from heat, sparks and open flame. Keep container tightly closed. Store in a cool and well-ventilated place. Store away from incompatible materials.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components

Type

Value

Methanol (67-56-1)

STEL

250 ppm

Components	Type	Value
	TWA	200 ppm

U.S. - OSHA

Components	Type	Value
Methanol (67-56-1)	PEL	200 ppm 260 mg/m3
	STEL	325 mg/m3 250 ppm
	TWA	200 ppm 260 mg/m3

Canada - Alberta

Components	Type	Value
Methanol (67-56-1)	STEL	328 mg/m3 250 ppm
	TWA	262 mg/m3 200 ppm

Canada - British Columbia

Components	Type	Value
Methanol (67-56-1)	STEL	250 ppm
	TWA	200 ppm

Canada - Ontario

Components	Type	Value
Methanol (67-56-1)	STEL	325 mg/m3 250 ppm
	TWA	260 mg/m3 200 ppm

Canada - Quebec

Components	Type	Value
Methanol (67-56-1)	STEL	328 mg/m3 250 ppm
	TWA	262 mg/m3 200 ppm

Mexico

Components	Type	Value
Methanol (67-56-1)	STEL	310 mg/m3 250 ppm
	TWA	260 mg/m3 200 ppm

Engineering controls

Use explosion-proof equipment. Should be handled in closed systems, if possible. Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Provide easy access to water supply or an emergency shower.

Personal protective equipment

Eye / face protection

Wear safety glasses with side shields (or goggles).

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 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. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure air supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical & Chemical Properties

Appearance	Straw or yellow, odorless liquid.
Color	Straw/yellow.
Odor	Odorless.
Odor threshold	Not available.
Physical state	Liquid.
Form	Liquid.
pH	3 (20°C (68°F))
Melting point	No data available.
Freezing point	No data available.
Boiling point	Not determined
Flash point	120.2 °F (49 °C)
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	No data available.
Flammability limits in air, lower, % by volume	No data 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	No data available.
Decomposition temperature	Not available.
Density	0.97 g/cm ³ 20°C (68°F)

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Acids. Oxidizing agents. Metals. Strong bases.
Hazardous decomposition products	Carbon monoxide. Formaldehyde.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information**Toxicological data****Components**

Methanol (67-56-1)

Test Results

Acute Dermal LD50 Rabbit: 15800 mg/kg

Acute Inhalation LC50 Rat: 87.5 mg/l 6 Hours

Components**Test Results**

Methanol (67-56-1)

Acute Oral LD50 Rat: 5628 mg/kg

Acute effects

Prolonged and repeated exposure to high vapor concentrations, skin absorption or ingestion of methanol may result in visual disturbances, metabolic acidosis, headache, giddiness, nausea, insomnia, gastric disturbance, dizziness, and slow breathing. There have been severe cases reported of blindness, coma and death due to the ingestion of methanol. Causes skin and eye irritation. Harmful by inhalation, in contact with skin and if swallowed. May cause mild central nervous system effects. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness.

Local effects

May cause redness and pain.

US ACGIH Threshold Limit Values: Skin designation

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

Sensitization

Not a skin sensitizer.

Chronic effects

Prolonged skin contact may cause dermatitis. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness. In serious cases absorption of methanol in the body may lead to damage to the eyesight. Prolonged and repeated exposure to high vapor concentrations, skin absorption or ingestion of methanol may result in visual disturbances, metabolic acidosis, headache, giddiness, nausea, insomnia, gastric disturbance, dizziness, and slow breathing. There have been severe cases reported of blindness, coma and death due to the ingestion of methanol.

Carcinogenicity

No data available.

Epidemiology

Not available.

Mutagenicity

Not available.

Reproductive effects

The information located does not suggest that methanol is a reproductive toxin.

Teratogenicity

Methanol has produced fetotoxicity in rats and teratogenicity in mice exposed by inhalation to high concentrations that did not produce significant maternal toxicity.

Further information

Symptoms may be delayed. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness. In serious cases absorption of methanol in the body may lead to damage to the eyesight. Methanol: Human exposure to methanol may result in illness, systemic poisoning, blindness, optic nerve damage and perhaps death, after being ingested, absorbed through the skin or inhaled. Death due to cardiac or respiratory failure has been reported in some cases from consumption of as little as 30 mls.

12. Ecological Information**Ecotoxicological data****Components****Test Results**

Methanol (67-56-1)

EC50 Water flea (*Daphnia magna*): > 10000 mg/l 48 HoursLC50 Fathead minnow (*Pimephales promelas*): > 100 mg/l 96 Hours**Ecotoxicity**

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.

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**Waste codes**

D001: Waste Flammable material with a flash point <140 °F

Disposal instructions

Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Confirm disposal procedures with environmental engineer and local 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: SHIPPED AS AN EXCEPTED QUANTITY (all packaging <30 mls).

DOT

Basic shipping requirements:

UN number UN1993
Proper shipping name Flammable liquids, n.o.s. (Methanol RQ=33333 LBS)
Hazard class 3
Packing group III

Additional information:

Special provisions B1, B52, IB3, T4, TP1, TP29
Packaging exceptions 150
Packaging non bulk 203
Packaging bulk 242
ERG number 128

IATA

Basic shipping requirements:

UN number 1993
Proper shipping name Flammable liquid, n.o.s. (Methanol)
Hazard class 3
Packing group III

IMDG

Basic shipping requirements:

UN number 1993
Proper shipping name FLAMMABLE LIQUID, N.O.S. (Methanol)
Hazard class 3
Packing group III

TDG

Basic shipping requirements:

Proper shipping name FLAMMABLE LIQUID, N.O.S. (Methanol)
Hazard class 3
UN number UN1993
Packing group III
Marine pollutant Marine pollutant only when containing 10% or more substances identified as marine pollutants or severe marine pollutant when containing 1% or more substances identified as severe marine pollutants

Additional information:

Special provisions 16



DOT



IATA



IMDG



TDG

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/SARA Hazardous Substances - Not applicable.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Methanol (CAS 67-56-1) 1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Methanol (CAS 67-56-1) Listed.

CERCLA (Superfund) reportable quantity (lbs)

Methanol: 5000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) HAPS list

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 B3 - Flammable/Combustible
D1B - Immediate/Serious-TOXIC
D2A - Other Toxic Effects-VERY TOXIC
D2B - Other Toxic Effects-TOXIC

WHMIS labeling



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)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
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	No

*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

Methanol (CAS 67-56-1) Listed.

US - Massachusetts RTK - Substance: Listed substance

Methanol (CAS 67-56-1) Listed.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

Methanol (CAS 67-56-1) 500 LBS

US - New Jersey RTK - Substances: Listed substance

Methanol (CAS 67-56-1) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Methanol (CAS 67-56-1) 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: 2
 Physical hazard: 0

NFPA ratings
 Health: 2
 Flammability: 2
 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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