



MATERIAL SAFETY DATA SHEET (MSDS)/SAFETY DATA SHEET (SDS)

Mammalian Liver Profile

I. Product and Company Identification

Product Name: VetScan[®] Reagent Disc – Mammalian Liver Profile
A point of care blood diagnostic product

Part Numbers: 500-1040 (single); 500-0040-4 (4 Pack); 500-0040-12 (12 Pack)

Company Information:

Abaxis, Inc. 3240 Whipple Road Union City, CA 94587 Tel: +1-510-675-6500 Fax: +1-510-441-6150	Abaxis Europe GmbH Bunsenstr. 9-11 64347 Griesheim, Germany Tel: +49 6155 780 21 0 (EU) Fax: 06151-35079-11
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Customer Support: +1-800-822-2947 (US), abaxis@abaxis.com Tel: +49 6155 780 21 0 (EU) abaxis@abaxis.de

Emergency Number: +1-800-822-2947 (US)
This number is available only during business hours (9:00am to 5:00pm UTC)

II. Hazard Identification

OSHA Hazards: No known OSHA hazards

GHS Hazards: Not a dangerous or hazardous substance or preparation according to the Global Harmonized System (GHS).



Warning

CLP Hazards

H302	Harmful if swallowed
H315	Causes skin irritation
H335	May cause respiratory irritation
H401	To avoid risks to human health and the environment, comply with the instructions for use
P273	Avoid release to the environment
P235	Keep cool (2-8°C)



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P308 + P313 If exposed or concerned: Get medical advice/attention

HMIS Ranking:

Health hazard 1
Flammability 0
Physical hazards 0

NFPA Rating:

Health hazard 1
Fire 0
Reactivity hazard 0

Potential Health Effects:

Inhalation May cause respiratory tract irritation
Skin May cause skin irritation
Eyes May cause eye irritation

III. Composition/Information on Ingredients

This product consists of reagent beads comprised of a mixture of low hazard lyophilized chemical beads enclosed in a plastic rotor. These beads are in concentrations not associated with human or environmental toxicity, which contain among the listed items, enzymes, preservatives and stabilizers in concentrations under 1%. Each rotor contains a cup of diluent containing less than 0.5 ml of water and preservatives in concentrations of less than 1%.

Two proprietary reagents are part of this product. The properties of these reagents have not been thoroughly evaluated.

Table 1 below lists the chemicals present in the panel in concentrations of greater than 1%:

TABLE 1

NAME OF SUBSTANCE	%	CAS#	EC#	HAZARD
D- Mannitol	22.8	69-65-8	200-711-8	Skin Irrit. 2
Polyethylene Glycol, 8000	7.4	25322-68-3	500-038-2	Skin Irrit. 2
Polyethylene Glycol, 3400	5.1	25322-68-3	500-038-2	Skin Irrit. 2
Tris(hydroxymethyl)amino methane	5.0	77-86-1	201-064-4	Skin Irrit. 2
Polyethylene glycol 2000	3.2	9004-74-4	215-801-2	Skin Irrit. 2
Dextran, 70 USP	3.0	9004-54-0	232-677-5	Skin Irrit. 2
Glycine (aminoacetic)	2.7	56-40-6	200-272-2	Skin Irrit. 2



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TABLE 1 (Continued)

NAME OF SUBSTANCE	%	CAS#	EC#	HAZARD
Sodium chloride	2.4	7647-14-5	231-598-3	Skin Irrit. 2
Myo-Inositol	2.2	87-89-8	201-781-2	Skin Irrit. 2
Sodium Azide	1.8	26628-22-8	247-852-1	Skin Irrit. 2
Citric acid	1.1	77-92-9	201-069-1	Skin Irrit. 2
Triton X-100	1.1	9002-93-1	Unlisted	Skin Irrit. 2
Sodium Lauryl sulfate	1.1	151-21-3	205-788-1	Skin Irrit. 2

IV. First Aid Measures

- In case of eye contact: Flush eyes with copious amounts of water for a minimum of 15 minutes
- In case of inhalation: Allow the victim to rest in a well-ventilated area. Seek immediate medical attention
- In case of skin contact: Flush exposed skin with copious amounts of water for a minimum of 15 minutes
- In case of ingestion: Contact a physician in case of ingestion

V. Fire-Fighting Measures

No flammable properties are associated with this product.

- Extinguishing media: Use water spray, dry chemical or carbon dioxide
- Hazardous combustion products: May result in the formation of nitrogen and carbon oxides
- Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary
- Additional information: Combustion of the plastic rotor containing this preparation may result in toxic particulates and gases

VI. Accidental Release Measures

- Personal precautions:
- Eye Protection* Wear safety goggles or a face shield when cleaning up spills
- Skin Protection* Wear protective attire that prevents contamination of skin and personal clothing



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<i>Hand Protection</i>	Wear nitrile or vinyl gloves that cover exposed skin
<i>Other Protections</i>	Avoid breathing mists, dusts, and aerosols
<u>Environmental Controls:</u>	Prevent spilled product from entering drains
<u>Spill Clean-up Measures:</u>	Contain the material to prevent it from becoming airborne Place absorbent material on top of, and around the perimeter of the spill Sweep up the spilled material and decontaminate the area with soap and water or an equivalent cleaner

VII. Handling and Storage

This product is to be stored inside its packaging at 2-8°C in a cool, dry location. Wear gloves when handling the product and wash hands after removing gloves.

VIII. Exposure Controls/Personal Protection

None of the chemicals in this preparation are assigned occupational exposure limits. This product can be safely handled under normal conditions with no controls.

<u>Engineering Controls:</u>	Provide ventilation in work areas where this product is handled
<u>Personal Protective Equipment:</u>	Safety glasses and chemical-resistant gloves recommended

IX. Physical and Chemical Properties

<u>Physical state:</u>	Solid. Spherical lyophilized beads are enclosed in a sealed plastic package
<u>Color:</u>	Multi-colored beads
<u>Odor:</u>	Odorless
<u>Odor threshold:</u>	None established
<u>Chemical Properties:</u>	None available for <ul style="list-style-type: none">• pH, Melting point• Boiling point• Flash point• Lower Explosive Limit• Upper Explosive Limit• Vapor pressure• Vapor density (air=1)• Density (g/cm³)• Water solubility (20°C in g/l)• Auto ignition temperature



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X. Stability and Reactivity

<u>Reactivity:</u>	This preparation is not known to be reactive violently
<u>Chemical Stability:</u>	This preparation is known to be chemically stable
<u>Thermal Decomposition:</u>	Will decompose when burned
<u>Conditions to Avoid:</u>	Sunlight, heat (temperatures above 32°C)
<u>Incompatible Materials:</u>	No data available
<u>Hazardous Decomposition Products:</u>	No harmful decomposition products known
<u>Storage Conditions:</u>	Store in a cool (2-8°C), dry location

XI. Toxicological Information

No information found on Specific Symptoms. The toxicological properties of this preparation have not been fully investigated. Table 2 below lists the chemicals contained in the Panel and their toxicology information:

TABLE 2

NAME OF SUBSTANCE	ACUTE TOXICITY LD ₅₀ / LC ₅₀	CHRONIC TOXICITY (CMR) ¹
D- Mannitol	13,500 mg/kg (Oral, Rat)	No data available
Polyethylene glycol 8000	> 50,000 mg/kg (Oral,Rat)	No data available
Polyethylene glycol, 3400	> 50,000 mg/kg (Oral,Rat)	No data available
Tris(hydroxymethyl)amino methane	5900 mg/kg (Oral, Rat)	No data available
Polyethylene glycol, 2000	> 50,000 mg/kg (Oral, Rat)	No data available
Dextran 70	10,700 mg/kg (scu, Rat)	Reproductive effects to women at high doses
Glycine	7,930 mg/kg (Oral, Rat)	No data available
Sodium Chloride	3000 mg/kg (Oral, Rat)	No data available
Myo-Inositol	10,000 mg/kg (Oral, Mse)	No data available
Sodium Azide	10 mg/kg (Oral, Rabbit)	No data available
Citric acid	5,400 mg/kg (Oral, Rat)	No data available
Triton X-100	1,800 mg/kg (Oral, Rat)	No data available



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TABLE 2 (Continued)

NAME OF SUBSTANCE	ACUTE TOXICITY LD ₅₀ / LC ₅₀	CHRONIC TOXICITY (CMR) ¹
Sodium Lauryl sulfate	1,288 mg/kg (Oral, Rat)	No data available

(CMR)¹ – Refers to carcinogenicity, mutagenicity, and reproductive hazards.

XII. Ecological Information

No information found. This preparation is very soluble in water, and is not anticipated to present adverse ecotoxicological effects.

XIII. Disposal Considerations

<u>Waste Treatment Methods:</u>	Check regional waste requirements
<u>Waste Treatment Options:</u>	Treatment options approved by local authorities
<u>Sewage Disposal Options:</u>	Check with local authorities before discharge to the sewer
<u>Other Disposal Recommendations:</u>	Dispose of according to local, state, and national regulatory requirements
<u>U.S. Waste Classification:</u>	Non-RCRA Waste
<u>California Waste Codes:</u>	H132

XIV. Transport Information

Follow federal and local regulations.

DOT and IATA Shipping Information:

Not regulated as a dangerous good

ADR Information:

Not Applicable

IMDG:

Not a dangerous good

XV. Regulatory Information

US OSHA: Not regulated as a hazardous material

US EPA: Hazards to the environment have not been thoroughly investigated

EU Regulations: This material safety data sheet conforms to Regulation (EC) No 1272/2008, 1907/ 2006, and other requirements established by the European Union



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National Regulations: Germany: Water Hazard Class I

Chemical Safety Assessment: A Chemical Safety Assessment has not been completed for this product

XVI. Other Information

The above information is believed to be correct but does not purport to be inclusive and shall be used only as a guide. Abaxis shall not be held liable for any damage resulting from handling or from contact with the above product.

Precautionary Statements:

R36 Irritating to eyes

R38 Irritating to skin

S24/ 25 Avoid contact with skin and eyes